THIS WEEK'S National Petroleum NEWS

Coming Meetings

1933

American Institute of Chemical Engineers, Chicago, June 14, 15, 16.

American Petroleum Institute, Regional Code Committees: Eastern Region, Commodore Hotel, New York, June 20; Northeastern region, A. P. I. Board Room, 250 Park Ave., New York, June 21.

American Society for Testing Materials, Stevens Hotel, Chicago, June 26 to 30.

American Society of Mechanical Engineers, Chicago, June 26 to 30.

Pennsylvania Grade Crude Oil Association, State College, Pa., June 29, 30.

World Petroleum Congress, Imperial College of Science and Technology, South Kensington, London, England, July 19 to 25.

International Geological Congress, Washington, D. C., July 22 to 29.

Society of Automotive Engineers, Chicago, Aug. 28 to Sept. 4.

National Petroleum Association, Traymore Hotel, Atlantic City, N. J., Sept. 20, 21, 22.

International Gas Conference and annual meeting, American Gas Association, Stevens Hotel, Chicago, Sept. 25 to 30.

Ohio Petroleum Marketers Association, Inc., Hotel Mayflower, Akron, Sept. 27, 28.

American Petroleum Institute, annual meeting, Chicago, Oct. 24, 25, 26.

NATIONAL PETROLEUM NEWS

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As Close to a Man as His Pay Check

THE hardest thing in the world has been for the man working hard at his own job in the oil industry, or running his own company and absorbed in its activities, to realize that this new recovery legislation directly concerns him. In reality, however, it is as close to him as his own pay check.

NATIONAL PETROLEUM NEWS, through an augmented Washington bureau, has made a special effort to bring to its readers, in this issue, the latest developments regarding this and other matters of legislation in Congress affecting the oil industry.

With that body on the eve of adjournment, its latest enactments bring to a head legislative proposals considered the past weeks, in several of which every oil executive is directly concerned. Every reader of NATIONAL PETROLEUM NEWS should study the interpretation, in the articles in this issue, of how these new laws will affect the oil industry.

Photo by Blank-Stoller, Inc.

WILLIAM STAMPS FARISH, aggressive oil executive and ardent conservation proponent, has stepped into the No. 1 job in the petroleum industry, the chairmanship of the Standard Oil Co. of New Jersey. He resigned as president of the closely affiliated Humble Oil & Refining Co. June 6 to accept the new position.

Since 1917 Mr. Farish has been largely instrumental in building Humble from a $4,000,000 collection of properties into the most important oil company in Texas with tremendous crude reserves in that prolific state. Turn to P. 28 for more details.

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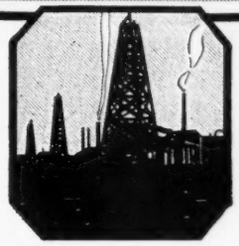

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Conferences Set to Adopt Oil's Program Under the New Recovery Law

NEW YORK, June 12

THE first step has been taken, in the oil industry, to bring its functioning into line with the provisons of the new federal industrial control features of the recovery bill.

In accordance with suggestions from Washington for administering the law, and using the same plan other industries are following, the American Petroleum Institute has proposed to other oil associations that conferences be held for the production and marketing branches of the industry.

The conference on production will be held at the Stevens Hotel, in Chicago, June 15.

That on marketing has been fixed for June 22, also at the Stevens, in Chicago.

At these conferences, of representatives of the oil associations, the effort will be made to work out programs to submit to the government.

If such programs can be drawn up and endorsed by the majority of interests present, for the production and marketing branches of the oil industry, and in turn these can receive the approvals of the government, it will mean a minimum of federal control, or supervision, of the oil industry.

Of course, if the majority in an industry cannot get together on its ideas of what is good business practice, or if there is too large and vociferous a minority, the next step by the government is problematical. The law gives the President authority to dictate policies and to license companies to operate, as an extreme.

Industry at large is proceeding on the theory that the existing associations within an industry are the medium through which to establish the will, or the ideas, of the majority of operators in that industry, and to translate them into codes, or statements of fair and equitable practices, under which the majority perhaps can agree to operate.

Thus, for the oil industry, the institute took the initiative in inaugurating the program. Its president, Axtell J. Byles, a few days ago sent invitations to the officers of 24 organizations of producers in 12 states, asking each association to send not more than 5 representatives to join with a committee of 5 from the institute in a meeting at Chicago June 15.

This conference will discuss and prepare a tentative draft of a code of practices to deal with oil production in conformity with the new federal law.

The conference called to deal with marketing problems, the week following the conference of producers will include representatives of all refiner and marketer associations. These will be asked to send a small number of representatives to attempt to draw up a code of marketing practices which the majority of companies in this branch of the industry can agree to observe.

The problem here should be simplified—but may be complicated—by the fact the oil marketing business now, has its code of marketing practices, the great majority of oil com- which has been duly accepted by

Recovery Bill Passes

By Telegraph

WASHINGTON, June 13. —The Senate adopted the National Industrial Recovery Bill late this afternoon, 46 to 39. It is believed the President will sign it without delay, making its provisions, including the half cent increase in the federal gasoline tax, effective the day following his signing the measure.

panies and recognized by the government, and is still, officially at least, in effect.

In language, the oil industry's code is about everything that could be desired. However, its best friends will not attempt to prove that it has accomplished anything like the success that was hoped for it in doing away with unfair and costly practices in the marketing of gasoline and motor oil. The status of the existing code, under the new order of things, remains to be seen.

SUCH codes, or definitions of fair practices, which may be drawn up under the new industrial control law, may bring in one factor which was strictly taboo under the old order, where the shadow of threat of prosecutions under the anti-trust laws lurked to frighten any two or more business men from different companies who discussed prices.

Discussion of prices, at least in the sense that prices must exist at a profitable level, if the particular industry in question is to rehabilitate itself, will not be taboo under the new order of things. One purpose of the new law is to find means of ending the cutthroat competition which has kept industries from economic recovery even where their volume of trade has not been so greatly affected.

The American Petroleum Institute already has named its committee to meet with other refiner and marketer associations, to discuss marketing practices. The chairman is C. E. Arnott, president of Socony-Vacuum. Other members are H. T. Klein, counsel, The Texas Co.; E. S. Hall, counsel, Standard Oil Co. of New Jersey; J. W. Carnes, vice-president, Sinclair Refining Co.; W. T. Holliday, president Standard Oil Co. of Ohio; Allan Jackson, vice-president in charge of marketing, Standard Oil Co. of Indiana.

The list of refiner and marketer associations who will be invited to send representatives has not yet been issued. It will include the large number of active state associations, whose officers and members have been the force which has kept the present code of practices a factor in oil marketing.

The discussions, in the conference on production practice, scheduled for this week in Chicago, will likely not be smooth sailing for the majority of companies and operators, almost regardless of the views they express. Among producers there is a small, but exceedingly active, group of dissenters.

The question will be can a code of operating practices be drawn up which can secure the endorsement of this minority, and be presented to Washington as the code under which the oil industry agrees to operate in the production branch. If the code carries the endorsement of only the majority, as is provided for in the plans at Washington for administering the new control law, how can this minority be brought into line, and how loudly will it make itself felt at Washington, in further consideration of oil production practices. To date it has made its voice felt very effectively.

Will the opposition of a small minority to the code of production practices the majority of oil companies desire, which opposition has been responsible for the failure of the oil industry's voluntary proration program, lead to some of the measures provided for in the control law for such extremes, such as licensing of operators to engage in business? Such measures would virtually mean federal dictatorship of the oil business.

AMONG vital problems to a large number of producers in this country, although their total volume of production relatively is not great, is what to do with the so-called stripper wells. These are the wells producing, at the most, a few barrels a day, in the settled producing fields of the country. It is likely that suggestions will be made to the conference proposing that the production of no wells making five barrels or less a day be disturbed in production restriction program.

Another point likely to be brought up, in any allocation of crude supply among the various producing states which is proposed, is that each state be allowed to produce sufficient oil to fulfill its own requirements. In the past, fields in one state have been curtailed below the actual needs of the state, because of flush oil from fields in nearby states supplying this market.

Informal opinions of several prominent Mid-Continent producers and lawyers experienced in production matters point to an attempt to include in the code, or program for this branch of the industry, the allocation of definite amounts of production to the various states.

This, it is reported, will be the primary proposal of the American Petroleum Institute committee in the meeting.

IT IS fairly certain a proposal also will be made to require each new pool to be developed as a unit, under such conditions as a majority of the producers therein may decree.

One Mid-Continent delegate has said that he will urge the adoption of a rule forbidding top leasing, which practice has at times forced the drilling of wildcat wells. There is also a suggestion that the question of well spacing might properly be brought under the code, although this might be covered in the unit development rule.

A question that is creating considerable discussion is that pertaining to the anti-trust laws. While the federal bill gives immunity from federal prosecution, where the industry is proceeding under an approved code, it is a speculative question whether the same guarantee can be given with respect to state laws. The attitude of Texas would be important in this regard, for its laws are probably the most rigid of any state. No guarantees have come from its officials while protests from its attorney general and the legislature against federal interference with state control of the producing business have been especially loud.

The Chicago meeting of producers promises to be anything but a perfunctory gathering. Among the chosen delegates from producing associations were some who have a pronounced antipathy to the institute and the meeting is certain not to lack debate.

THE EDITORS' VIEWPOINT

Sound Operating is Possible, with Minimum Of Supervision by the Government

By Warren C. Platt, Editor

By Teletype
NEW YORK, June 13

THE oil industry today, as the National Industrial Recovery bill passes, has its choice of two things, prosperity and a sound industry or continued and greater chaos running no one knows how long.

From this bill, which should be the law of the land as you read this, our industry should be able to achieve that for which it has long been working, but which it has to date failed to effect. That is a plan by which crude supply can be balanced with profitable demand—including supply of its products,—and an intelligent and profitable marketing structure, and marketing practices.

This will take the oil industry into reasonable profits, will provide an early recovery, at reasonable wages, from unemployment, will pay dividends and will permit the industry to replace, and even add to, a lot of worn out and obsolete equipment. This will make its recovery felt in kindred equipment industries.

All this is possible under the new recovery law, and if the temper of leading oil men is properly read, is also probable. For these men are going to make the effort of their lives to make the law work, with the absolute minimum of government supervision and interference, which is what the government says it wants.

The years of effort to balance crude supply to reasonable demand should now be capped by success, if the industry can put aside the bickerings and fights of the past and if the law enforcement officers of the interested states will do likewise.

While the recovery law is to end when recovery has been accomplished, there is no reason why the good from that law cannot be continued on into the future in the fundamental principles controlling the oil industry. What oil men could not get together on heretofore they should be able to under this law and thus finally get the proper economic and conservation control over our crude supply. The federal government is now the arbiter, with real power to act. Heretofore it has had to sit on the sideline.

If you, our readers, try to see how far you can go in your own thinking and doing under this law, and if you, the conservation enforcement officers of the country, do likewise, one can hardly paint too rosy a picture of the oil industry's future.

If that is not done, however, there is bound to be the worst kind of controversy before the government control officers and in the courts. If bitterness and personal selfishness come into the situation and the power, whatever it may be, which has been given the President and his associates in the bill has to be exercised, there is little question but there will be a multitude of law suits. These will take months and perhaps even a year or more to get through the courts, with what result is problematical as to the status of the law at the end; but one result will be most certain and that is the oil industry, and other industries affected by the law, will be in a turmoil of operating losses and probably even labor trouble, of the most serious kind.

Again, in dwelling upon the picture that can be painted, if that picture is not to be a rosy one it certainly will be one of the blackest in the history of this industry.

IN SIZING up the present economic situation, one must discard some of the pet ideas of the past and realize that the public's social thinking, whether one may like it or not, has gone a long way in these past few years. We have but to look at Russia today and at Germany and Italy for striking examples of that change, or you may call it progress, which has seized the world's thought. People have come a considerable way down the road of broader social thinking and acting and they are not going to retreat. Just where that road ahead may lead no one knows. Its destination, its directness thereto, will depend to quite an extent upon the conduct of all business men, and all oil men, in today's crisis.

One must bear in mind, in judging the oil industry's activity under this control law, that the primary aim of the law is not to save capitalism for itself, not to get dividends for stockholders or salaries for officers; but to get people back to work at a living wage. This must be done as quickly as possible because the finances of the country, of its federal, state and municipal governments, and of its taxpayers cannot longer

carry the load of alms to the unemployed. If this law is not made a success in that direction, we will undoubtedly have something much worse, and one does not have to be a pessimist to realize that.

As conservative, some say reactionary, an organization as the National Association of Manufacturers, some of whose members have been bitterly fighting this law, says in a report by its managing director on how industries can organize to operate under this law, and in discussing the future effects of the law:

"It should be borne in mind that, while the immediate declared objective is to increase employment and to raise purchasing power through increased and wider spread wages, as well as to encourage improved conditions of employment, the fundamental and real effect of the bill is not revealed in its emergency character.

"Its eventual consequences are designed by its authors to be a better balanced national economy, built on the premise that the welfare of all the people is a necessary condition to the welfare of the individual; in contrast to the theory of Laissez-Faire, which exalts the individual, rather than the group of which he is a part.

"A bloodless, but nevertheless far reaching, revolution is dethroning the unrestricted individual and making the group our economic and social unit. Whether or not this is a permanent change, it must be recognized in the individual points of view with which the proposed new organization and direction of industry is approached.

"The first step for each individual firm is to recognize the necessity of becoming 'group minded' and to accept some limitation of individual rights for the sake of promised enlarged practical advantage.

"The second step for the individual members of an industry is to make sure that their trade association is qualified to function as an effective agency in the promotion of self government. The alternative is direct government supervision and control."

ALL this sounds much like preaching, but it is highly essential that every oil man keep these points in mind as he approaches his individual task under the new recovery law.

The oil industry, as well as all other industries, is moving rapidly to adjust itself to obtain the advantages of the law, with the least of government interference. The oil industry looks back to an exceptionally good record during the war. Its affairs were conducted then by a war service committee of its own choosing, with the advice of Mark L. Requa and a few associates representing the government "advising" and not "commanding." The hope in oil men's minds is that the same kind of a job can be done, in substantially the same way, during this emergency and under this recovery law. Some of our best minds down here figure there is no reason why the industry cannot repeat that excellent job of war times. But it is up to each individual oil man.

General Johnson, whom the President has selected to direct industry under this control bill, has frequently said in public and in private that he wants each industry to do its own job.

Those who have talked to him are certain he is sincere about it. They say he is most frank and even blunt in his remarks and that he has a business man's point of view, despite his years in the army, though most of those army years were spent in the legal end. Since then he has had manufacturing and business experience and has been a close associate of Barney Baruch, stock market operator and business man, who certainly hasn't a reputation for associating with even parlor socialists. Those who have talked to General Johnson, and he is not hard to get to except as he is pressed for time, are confident he is an excellent man for the job.

This does not concern the oil industry so much because our industry has been exceptionally free from labor organizations, due to the character of the work in the industry and due also to the fact that oil has paid its labor exceptionally well and still is today. Some of our big companies have made not more than a 10 per cent cut during this depression.

HOWEVER, it would be well for every oil executive to study his labor and employe situation and, if he so desires, make them appreciate that the door to his office is wide open at all times and that his reception will be intelligently and honestly sympathetic. Otherwise, with any amount of discontent among oil company employes, the door to the organized labor unions will be wide open.

There will be set up for each industry some kind of a minimum wage scale, just how definite and how extensive that will be, will probably depend largely on the amount of employment now in that industry and the height of the wage level. Oil, it is known, has a relatively high wage level, reasonable hours of employment and many on the payrolls. It is possible, if the facts support this impression, that oil labor may not be much "controlled" as to hours and wages, because the aim of the administration is to get an industry back to where it was as far as possible, in numbers employed and dollars paid in wages, present value of the dollar being considered.

Some think that, if there is enough certainty of improved oil prices, the oil companies might be able to raise wages at once or at an early date, present value of the dollar considered. Such a move would place the oil industry in the front as an industry leading the way out of this trouble. It would also go a long way toward preventing possible labor troubles, such as men in other industries fear. However, there can be no advance in oil company payrolls without an advance in prices which will not only take care of the increased payrolls but take the oil companies out of the red.

General Johnson will be advised by two committees of five each, one representing labor and the other industry and on this last there is no question but will be Walter C. Teagle, of the Standard Oil Co. (New Jersey). The bringing of W. S. Farish from the presidency of the Humble Oil and Refining Co. at Houston, to the chair-

manship of the board of the Standard of New Jersey, is looked upon as a move to permit Mr. Teagle to give his full time to this public service of helping get this country back to prosperity. Mr. Farish is expected to move to New York by July 1.

According to present report at Washington, there also will be some kind of a general advisory committee representing all industry and labor, numbering perhaps 25 or 30 or more members. Some of the members of this are said to be already selected.

AT THE head of each of the 10 or 15 major industries, and oil is one, will be three men. One will be selected by General Johnson. He will be required, it is said according to present plans, to have as good a knowledge of the particular industry as it is possible to find in a man who at the same time does not have at the present moment a single dollar's worth of interest or investment in that industry and who ranks high as an all around sane business man. This will be a full time job presumably and, if possible, of the "Dollar a Year" variety. Let us hope so at all events.

From what is known of General Johnson, it is fairly presumed that he will pick this man only after careful search and sound advice from all in the particular industry, but the choice will be General Johnson's and not the industry's nor of its labor.

Associated with this representative of the government will be one recommended by the Department of Labor to represent the labor in that industry. This does not mean that the American Federation of Labor or any other union organization is going to name this man. Miss Perkins, the present Secretary of the Department of Labor, was opposed by the American Federation of Labor, when President Roosevelt nominated her. She is recognized as quite "socially minded," but not a union person.

This labor man will truly, it is planned, represent the labor in an industry. Presumably, if the industry is particularly "well organized" the representative will be a member of a labor union, but in the oil industry, which decidedly is not organized, it is conceivable that the representative will not be a member of a labor union. However, no intimation as to this has been given by General Johnson or any of his associates.

The third associate of the head of an industry will be a true representative of that industry, to be recommended by the Department of Commerce and without question on the advice of the industry. These two advisory jobs, in an industry the size of oil, will probably have to be full time jobs, with the men residing in Washington, to be immediately available for all questions that will arise. So far as any statement from General Johnson goes, this is the extent of his organization for each industry, barring necessary advisory committees, statisticians, clerks and so on.

One of the biggest fears business has in this matter is what the labor unions and racketeers will do. Organized labor, it is known, looks upon this law as a golden opportunity, and quite naturally. Racketeers are suspected of having the same thought. General Johnson has said publicly that he will not stand for any racketeering nor for any group going further than it has at the present time; but there are plenty of ways to get around the General's honest purposes.

Representatives of the heretofore well organized industries are most fearful of the outcome and are preparing for battle, so to speak, although of course there will be many kind words and bows of respect. It has been hard picking these last few years for labor unions with more men than jobs. Unions thrive when the reverse is true.

As to the oil industry's immediate procedure under this new law, as in most other industries, various associations of oil men have been studying the situation and even have committees at work to see what can and should be done. The American Petroleum Institute, because it represents so many varied and even opposing interests in the oil industry and because of the great conflict of opinions in the past, has taken no position on the bill at all.

HOWEVER, with the consent of the other oil associations, the institute has arranged for a meeting of five representatives from every oil producing association in the country, at Chicago June 15, and for a meeting of representatives of all refiners and marketers associations the week following, also in Chicago. These meetings will organize and then attempt to work out codes, or programs, under which the production and marketing branches of the industry can operate.

The necessity for any extended price activity should be needless if the producing interests and the state conservation officers can get together on an enforceable crude program which will balance supply to demand under this new law. These interests can frankly discuss that balance in relation to price and there is no reason why a price cannot be determined for crude which will be satisfactory.

Taking such a price, on a properly balanced crude market, the refinery prices will largely take care of themselves. Then, on top of the tank car prices we have these new retail price schedules which some of the larger oil companies have put in effect, which probably will carry over with little if any change.

Providing the crude price can come from an absolutely balanced crude market, there is no reason for any price fixing or supervising machinery anywhere else in the industry. There may be some price cutters but they can be handled with moral suasion and, if this does not work, they probably will not be important enough, under proper crude conditions, to cut much ice.

In short, if the oil industry does what it easily can do, forget its fights of the past and get down to a plan of operating under this new recovery law, with its members' minds open and their hearts free of bias, we should be able to lead the industries of the country in that much to be desired return to prosperity.

Oil Stabilization to be Sought Early; How the Act will be Applied

By Roger B. Stafford
N. P. N. Staff Writer

WASHINGTON, June 13

STABILIZATION of production, transportation, refining and marketing of petroleum and its products will be undertaken by the federal government. However, it will be under the provisions of the National Industrial Recovery Act and not under any separate oil control legislation by Congress.

Oil stabilization under this act, will be under an administration made up of a representative of the industry, a representative of labor, and an impartial representative of the government or consumers.

It is possible that this impartial representative, in the case of the oil industry, will be General Hugh S. Johnson, who has been selected by President Roosevelt to be the administrator of industrial recovery. To him will be delegated the power the act gives the President.

It is likely that Gen. Johnson will also serve as the impartial representative in similar setups for the steel, textile, automotive and bituminous coal industries.

The labor representative is to be one of a board of labor advisors selected by Secretary of Labor Perkins. The industrial representative, who is supposed to be familiar with the industry he is representing, but to have no financial interest in it, will be one of a board of advisors to be selected by Secretary of Commerce Roper.

The labor and industrial representatives will have no executive authority. Their service will be that of consultant.

Working with this board will be another, made up of members of the oil industry. This board, according to preliminary plans, will also have three members, one of whom shall represent minority interests in the industry.

There will be a code of fair competition and possibly another agreement, or agreements, to which the President or his administrator, Gen. Hugh S. Johnson, will be a party.

When a code is submitted it will be taken up with the administrator, or his agent, who will consult with the industrial and labor advisors. Because the recovery act is intended to spread employment and increase buying power any code that contains maximum hours of labor and minimum rates of pay provisions is expected to gain immediate favor.

Complete details of the stabilization organization are not yet available and plans of the administration have not been announced but will be in a day or so. Whatever is published here is preliminary and, perforce, subject to change as organization progresses.

AN EFORT will be made in this article to outline the intent underlying the recovery act, as that intent has been revealed by Gen. Johnson and his aides in talks with representatives of industry and in debates in Congress, particularly in the Senate by Senator Wagner of New York, whose name is popularly attached to the measure.

An effort also will be made to depict the application of the act to the oil industry, as well as to relate the developments in the closing days of the campaign for and against oil control, and the reactions of proponents and opponents of control to what Congress gave the industry.

The troubles of the oil industry are basically in the production division and it was the producers of crude oil that have sought and opposed control of production for several years.

The fight which had its first concrete result in the enactment of the recovery act, with a special oil regulation section, was a three-cornered affair. Two of the contestants fought in the open. The third contestant did not even stand in the background; it was invisible but it was victorious.

Special Legislation Fought

The third contestant is believed here to be made up of a group of major companies which feared or thought it unwise to single out petroleum from other industries for federal regulation. This third faction, the turn of events indicates, thought it would be difficult to divorce federal regulation even though proposed legislation applying solely to the oil industry placed a two-year limitation on federal control. This faction was satisfied with what could be accomplished under the general rules that would apply to all industry except railroads and agriculture, for which special legislation has been passed.

The fight for special control was directed mainly through the Independent Petroleum Association of America, the group headed by Wirt Franklin, which came into existence more than three years ago in the campaign for a petroleum tariff. This association was joined in the hearings before congressional committees by other producing groups, including many stripper well operators in the Mid-Continent and eastern fields. Russell B. Brown, secretary of the I.P.A.A., was its leading advocate in Washington.

The group opposed to any kind of control came into promi-

nence here last spring at the meeting of representatives of governors of oil producing states, the origin of the idea for which is still a deep secret. This group organized as the Independent Petroleum Association Opposed to Monopoly. It opposed production control but its members have worked for divorcement and regulation of pipelines.

Among its leading advocates at hearings here were John B. Elliott, of California, who managed the campaigns of President Roosevelt, Vice-President Garner and Senator McAdoo in the 1932 campaign in California; Jack Blalock, Marshall, Texas, representative of a large number of Texas Independent producers, and Herbert R. Macmillan, of California.

Senator McAdoo who won election under the Elliott management, has been the leading exponent of pipeline divorce in Congress and also sponsor of an investigation of all phases of the petroleum industry.

Efforts of the control group have been persistent. First it tried separate oil legislation. It is considered to have been influential in having the Interior department draft the bills which Mr. Marland, of Oklahoma, introduced in the House and Senator Capper, of Kansas, in the Senate. The Marland bill, which carried a provision for a tax of 0.25 cent a barrel of crude produced in this country or imported, died with adjournment of Congress.

The group next tried to have a long amendment attached to the industrial control bill, containing the essential features of the Marland-Capper proposal. The Senate Finance committee voted down this suggestion and also the short amendment, which Secretary of the Interior Ickes offered with the statement that it had been approved by President Roosevelt.

Last Thursday Senator Thomas, of Oklahoma, offered on the floor of the Senate a short but broad amendment covering substantially the control features embodied in the offering of Secretary Ickes. This Thomas proposal was voted down without a record vote.

As the recovery bill was finally considered, it contain three points pertaining specifically to oil. One point was an authorization to the President to initiate before the Interstate Commerce Commission proceedings necessary to prescribe regulations to control pipeline operations and to fix reasonable, compensatory rates for crude and refined oils.

The second authorized the President to start proceedings to divorce pipelines from holding companies, where pipelines by unfair practices or exorbitant rates tended toward monopoly.

The third proposal is intended to prohibit the interstate shipment of illegally produced oil or that oil withdrawn from storage in excess of any state law of valid regulation.

The second pipeline subsection provides for divorcement proceedings only when and if practices of pipeline companies tend toward monopoly. The divorcement proposal of Senator McAdoo was still in pending when Congress adjourned. The Roosevelt administration has contended throughout the consideration of the recovery and oil control bills that the subject was too complicated for it to submit any intelligent divorcement measure at this session.

When compared with the general industrial control provisions, these oil regulations are simple, except as to what may be fair pipeline practice and fair rates. Just what will be attempted by the government with the co-operation of the industry is still a moot question, which may not be decided until after the industry gets together to draft a code or codes of fair competition.

Under the act, the President, or his delegated administrators, are required "to promote the fullest possible utilization of the present capacity of industries, to avoid undue restricton of production (except as may be temporarily required), to increase the consumption of industrial and agricultural products by increasing purchasing power, to reduce and relieve unemployment, to improve standards of labor, and otherwise to rehabilitate industry and conserve natural resources."

Senator Wagner said, "The bill is not a measure designed to curtail production or to lessen the volume of trade. It is a measure to expand trade and commerce by removing the barriers which have caused factories to close and men to walk the streets in idleness."

In spite of this general intention, it is expected here that curtailment of producton of crude oil will be among the first efforts of the recovery administration. There is a question whether the federal administration will attempt to allocate production. That provision contained in all the oil control proposals was voted down. Courts have always reviewed and given weight to the intentions underlying legislation. It, therefore, is doubtful that any recovery administration would

Text of the "Oil Regulation" Section (9) Of Industrial Recovery Act

Sec. 9 (a) The President is further authorized to initiate before the Interstate Commerce Commission proceedings necessary to prescribe regulations to control the operations of oil pipe lines and to fix reasonable, compensatory rates for the transportation of petroleum and its products by pipe lines, and the Interstate Commerce Commission shall grant preference to the hearings and determination of such cases.

(b) The President is authorized to institute proceedings to divorce from any holding company any pipe-line company controlled by such holding company which pipe-line company by unfair practices or by exorbitant rates in the transportation of petroleum or its products tends to create a monopoly.

(c) The President is authorized to prohibit the transportation in interstate and foreign commerce of petroleum and the products thereof produced or withdrawn from storage in excess of the amount permitted to be produced or withdrawn from storage by any State law or valid regulation or order prescribed thereunder, by any board, commission, officer, or other duly authorized agency of a State. Any violation of any order of the President issued under the provisions of this subsection shall be punishable by fine of not to exceed $1,000, or imprisonment for not to exceed six months, or both.

attempt to allocate to the various states the amount of oil that state might produce in view of the adverse votes given the proposals.

The position of the anti-control people in this respect was stated by Mr. Blalock thus:

"It is inconceivable to me that anyone would think that the federal government would make any effort to control production of petroleum within the boundaries of the several states. This is a matter peculiarly within the province of the state and is not interstate commerce."

Industries to Draft Codes

The codes of fair competition which are authorized under the act will be the working laws of industry: the charters of the "new deal." These codes may be drafted by industry and submitted to the President or his administrators for approval. Once approved, they are expected to be as binding as a statute and the President has been granted licensing power to enforce them.

The various industries will draft their own codes; enact their own governing statutes within the wide limitations of the act.

But no code will be approved, said Senator Wagner, unless it embodies these three points:

1. Recognition of the right of employes to organize and bargain collectively through representatives of their own choosing;

2. Prohibition of anti-union or "yellow dog" contracts as a condition of employment, and

3. Acceptance of maximum hours of labor and minimum rates of pay and other standards of working conditions approved by the President.

Under a code unionization will be permitted, something strange to the oil industry. Labor will have a voice in setting hours of labor and minimum rates of pay without prejudice to its jobs. Employes may, or may not, accept the company union and employers shall not say whether they may or may not.

The industry may set its own limits on working hours. The recovery administration will not say how long a working day may be. The 8-hour day is considered a likely daily limit but over a six-month period the average number of working hours are to be held to 36 hours a week with 48 hours the limit at any time except in the executive, administrative and professional classifications. Short work week will apply to office help. This is to spread employment among the laboring and clerical classes, one of the act's principal objects, together with the spread of buying power.

The act provides that codes shall not be designed to promote monopolies, or to eliminate or oppress small enterprises. The President may impose conditions for the protection of consumers, competitors, employes and others, even in other industries which may be affected by the operations of a particular industry.

Senator Borah had the Senate inject a provision against price fixing but this was removed in the conference. It is the belief that, because hours of labor and rates of pay may be set to protect labor, employers should have some protection against loss which would result were there no restraint against low, unfair price competition. However, price regulation may have to be provided for in a supplementary agreement with the President or his administrator as a party.

Anti-trust laws are to be suspended from application to any industry for which a code of fair competition or a licensing system has been approved. This suspension is to extend for 60 days beyond the expiration of the recovery act, provided that members of the industry do nothing to create a monopoly and abide by the code or license provisions.

The act expires in two years, or earlier on proclamation of the President or joint resolution of Congress that the economic emergency has passed.

Uniform Accounting Methods

The act provides for uniform accounting methods within an industry. This will aid in establishing prices that will be fair to the industry and the consumers. The interest of the administration in price fixing, it can be stated authoritatively, is limited to avoidance of monopolistic price agreements and prevention of sales below cost.

Minority groups will be given consideration in drafting of codes but no minority interest will be permitted to obstruct operation of the code once it has been approved.

There is a divergence of opinion as to what will be considered in determining majorities and minorities: capacity or units. A man high in the councils of the new recovery administration said late last week the determining factor would probably be capacity. That would give the major oil companies a more important position in establishing control regulations than if each small unit—producer, refiner or marketer—were granted equal voting rights. The plan actually to be followed will probably be announced in a few days.

The act empowers the President to limit importations, and even to declare an embargo against importations, if investigation proves such a step is necessary to attain the objects of the recovery measure. The oil control group sought definite limitation on petroleum to the average of the last six months of 1932, which was 108,000 barrels a day. There is no limit on oil importations in the act as passed but any imports that tend to upset the equilibrium of the oil industry in the U. S. once it is established, may be curtailed.

Licensing May Be Used

Recalcitrant groups, or individuals, may be brought into line by a licensing system if the President or his administrator deems such action necessary to make the act effective. Destructive price cutting will be one reason for instituting a license plan in any industry. This will apply to tank car, tank wagon and retail price cutting. Licensing is limited to one year. It is the intention of the administration to invoke licensing in only extreme cases.

Most of the provisions of the present code of practices for the marketing of petroleum products will probably be incorporated in any new code for the industry. To this old code will be added provisions pertaining to labor and possibly fair price determination.

If an industry does not voluntarily draft and submit a code

for approval, the President, or his administrator, on a complaint or his own motion, may prescribe a code. He may also prescribe labor practices, policies, wages, hours of labor and conditions of employment in any trade or subdivision thereof. Originally *geographical* subdivision was provided but the word *geographical* was removed. This has been interpretted to mean a code may be prescribed for each of the producing, refining or marketing divisions, or all.

The act puts real enforcement teeth into trade practice codes approved under the act. Violations of the codes are punishable with fines up to $500 and each day of violation constitutes a separate offense. If a licensing system is installed and operations are carried on without a license the penalty is a fine up to $500 or imprisonment not more than six months or both. Violation of the "hot oil" anti-shipping regulation is a fine of not more than $1000 or imprisonment for not more than six months, or both.

Enforcement of Act

Enforcement will be in the hands of U. S. district attorneys under the direction of the attorney general. Prosecutions will be in U. S. district courts. The Federal Trade Commission retains its powers of enforcing fair competition but its procedure is so roundabout that prosecutions are unlikely under the Federal Trade Commission act. The commission will serve as an investigating body.

Each group that submits a code for approval must supply a list of its members, the nonmembers it represents, and the percentage of the industry represented in the group. A questionnaire will be sent industrial groups seeking information about their membership, conditions or restrictions on admission to membership, fraction or part of industry represented by it, names of officers and directors, and similar detail. A factual brief on the relationship of that industry to other industries will probably be sought too. Before any submitted codes are approved, minority or other groups will be given an opportunity for open hearing.

Gen. Johnson will be assisted in the administration of the act by an advisory council. Several men have been considered, among them Walter C. Teagle, president, Standard Oil Co. (N. J.), Alfred P. Sloan, Jr., General Motors Corp.; Gerard Swope, General Electric Co., and Alexander Legge, International Harvester Co. and former chairman of the federal farm board.

Appointment of the advisory council is expected to be announced immediately but official confirmation of the appointment of the men mentioned has been withheld by both the White House and the recovery administration which has been in a stage of unofficial organization for several weeks.

The recovery administration is not planning at present to make any unusual efforts to protect weak members of an industry. Standards may be set below the average for an industry but it will be "just too bad" for its weakest units. There also will be no effort to keep out new competition so long as that competition abides by the provisions of a code approved for the particular industry.

Gen. Johnson who has been selected to be the administrator, helped Gen. Crowder organize the draft during the World War. Later he was engaged in industrial co-ordination for the War Industries Board. Lately he has been associated with Bernard M. Baruch, in New York.

Alky-Blend Surprise Move Defeated in Senate

WASHINGTON, June 11 Legislation tending toward "encouraged" blending of absolute ethyl alcohol with gasoline to make a motor fuel has continued to bob up in Congress in spite of the rush to put through the Roosevelt recovery program.

Senator Clark of Missouri almost succeeded Friday night in planting a "plum" tree as an amendment to the National Industrial Recovery bill. His proposal was beaten by the narrow margin of only four or five in a division of senators present. Opponents of alcohol-gasoline blends rushed to the floor when apprised of Senator Clark's surprise proposal and saved the day.

The Clark proposal was that the federal government should build and operate plants to manufacture ethyl alcohol from domestic farm products "in such states as the Secretary of Agriculture finds have made, by law or otherwise, adequate provision for requiring or encouraging the purchase from the corporation of such alcohol and the use thereof for motor vehicle fuel or other purposes."

Senator Clark announced his proposal was prepared by the Department of Agriculture and had the specific approval of the President. The latter statement was challenged by Senator Connally of Texas.

Senator Clark has pending a joint resolution providing for the appointment of three members of the senate and three members from the House of Representatives to survey the "advantages" of alcohol-gasoline motor fuel during the recess of Congress.

Michigan's Gas Tax Rate May Be Reduced 1-2c

LANSING, Mich., June 8.—Michigan's gasoline tax rate may be reduced ½-cent to compensate for the proposed 3 per cent general sales tax, which would include gasoline sales.

The senate passed the proposed ½ cent gas tax reduction today, and the measure goes to the house, where it will be considered later in connection with the general sales tax.

A hasty realignment of Michigan's proposed sales tax bill was necessary after the state supreme court ruled the Illinois sales tax unconstitutional because of exemptions including gasoline. To prevent similar court action the Michigan sales tax bill was re-written to include gasoline.

To offset the additional 3 per cent tax on gasoline sales H. H. Ragle, executive director, Michigan Oil Men's Association, made a vigorous plea for a reduction of ½ cent in the gasoline tax rate.

Gasoline Tax to Rise $62,000,000 Yearly Under Recovery Bill

WASHINGTON, June 13

THE federal government will increase the annual tax burden of American gasoline users $62,000,000 or more a year by the imposition of an extra 0.5-cent tax on motor fuel to be levied under the National Industrial Recovery act. This burden will continue until the year following the balancing of the federal budget or the repeal of the Eighteenth amendment, whichever is earlier, or June 30, 1935.

The 1-cent federal tax provided in the Revenue Act of 1932 also will be continued until June 30, 1935, by an amendment to the revenue act contained in the recovery act. It will not be affected by budget balancing or the legalization of hard liquor. There is grave doubt that this tax will ever be allowed to expire.

The half cent increase in the federal tax was up for passage in the Senate June 13. It had been passed by the House June 10 after the recovery bill had been in conference between the two houses a whole day and almost 100 amendments made in the recovery bill by the senate, had been ironed out.

Gasoline stocks of jobbers who have not qualified as "producers" by their blending activities and hence do not pay the gasoline tax direct to the federal government will not bear the 0.5-cent extra tax. Goods bought for cash or on open account from refiners prior to the effective date also do not carry the extra 0.5-cent tax. Their position is the same as when the 1-cent tax went into effect June 21, 1932.

Regulations 44 pertaining to the administration of the Revenue Act of 1932, apply to the collection of the increased federal tax.

The industrial recovery bill apparently contains hope that the half-cent increase may be removed next year by repeal of the eighteenth amendment before the end of 1933. That hope is not held widely in Washington because once taxes that are easily collectible are imposed, it is hard to remove them.

The increase in the federal tax rate was imposed in spite of the greatest battle ever waged against a gasoline tax by the oil industry. This fight was managed from Washington by Baird H. Markham, director of the American Petroleum Industries Committee; Fayette B. Dow, Washington counsel of the American Petroleum Institute, and other petroleum organizations, and their aides.

In a fight that was waged day and night for almost a month they saved gasoline consumers at least $62,000,000 a year. This saving is the result of their getting a half cent pared from the original proposals to raise revenue to pay interest on and to amortize the government securities to be issued to pay the cost of the national public works program.

The original proposals were for a 1-cent increase in the tax. It was estimated that a 1-cent increase would give the government approximately $125,000,000 a year toward the $220,000,000 a year estimated to be needed for the public works debt service.

When the House Ways and Means Committee wrote the taxation section of the recovery bill it placed the tax increase at 0.75 cent a gallon. The bill was so passed by the House. The Senate Finance Committee, deluged with telegraphic, telephone, and mail protests against an increase in the tax, and facing several efforts to have the increase stricken from the bill and a general manufacturers' excise tax substituted for it, cut the rate of increase another 0.25 cent so the bill was passed by the Senate, and later the conference report on the measure, with only a 0.5-cent increase.

The only record vote in the Senate on the line-up on the gasoline tax came Friday night when Senator Gore of Oklahoma moved to strike out the gasoline tax increase provision in the recovery bill. This proposal was beaten 45 to 35 and among the 45 are reported to have been 16 senators who had promised their constituents that they would vote against the tax.

Those who voted against Senator Gore's motion to eliminate the tax increase were:

Adams of Colorado, Ashurst of Arizona; Austin of Vermont; Bachman of Tennessee; Bankhead of Alabama; Barkley of Kentucky; Bone of Washington; Bratton of New Mexico; Brown of New Hampshire; Bulkley of Ohio; Byrnes of South Carolina; Clark of Missouri; Coolidge of Massachusetts; Copeland of New York; Costigan of Colorado; Dickinson of Iowa; Dieterich of Illinois; Dill of Washington; Duffy of Wisconsin; Erickson of Montana; Frazier of North Dakota; George of Georgia; Harrison of Mississippi; Hayden of Arizona; Johnson of California; Kendrick of Wyoming; LaFollette of Wisconsin; Lonergan of Connecticut; Long of Louisiana; McCarran of Nevada; McKeller of Tennessee; Murphy of Iowa; Neely of West Virginia; Norris of Nebraska; Overton of Louisiana; Reynolds of North Carolina; Robinson of Arkansas; Schall of Minnesota; Sheppard of Texas; Stephens of Mississippi; Thomas of Utah; Thompson of Nebraska; Van Nuys of Indiana; Wagner of New York; Walsh of Massachusetts, and Wheeler of Montana.

THOSE who voted to eliminate the tax increase were:

Barbour of New Jersey; Black of Alabama; Borah of Idaho; Bulow of South Dakota; Byrd of Virginia; Capper of Kansas; Carey of Wyoming; Connally of Texas; Cutting of New Mexico; Davis of Pennsylvania; Goldsborough of Maryland; Gore of Oklahoma; Hale of Maine; Hastings of Delaware; Hatfield of West Virginia; Kean of New Jersey; Keyes of New Hampshire; King of Utah; McGill of Kansas; Metcalf of Rhode Island; Nye of North Dakota; Patterson of Missouri; Pope of Idaho; Reed of Pennsylvania; Robinson of

Indiana; Russell of Georgia; Shipstead of Minnesota; Steiwer of Oregon; Thomas of Oklahoma; Townsend of Delaware; Trammell of Florida; Tydings of Maryland; Vandenberg of Michigan; Walcott of Connecticut, and White of Maine.

Tax Free Sales to Cities and States Allowed Under New Law

WASHINGTON, June 11

BEGINNING sometime this month petroleum marketers may sell gasoline and lubricating oils tax free to states and their political subdivisions. The same day brokers and refiners may sell tax free lubricating oils to compounders who, under new amendments to the Revenue Act of 1932, will be considered manufacturers.

These provisions are contained in H. R. 5040 which was finally passed by both houses of Congress June 9 and sent to President Roosevelt who is expected to sign it soon. It will become effective 15 days after he signs it. The bill removes discriminations from which Independent marketers have suffered for a year.

Resellers in buying must supply original sellers with such affidavits or declarations provided in Regulations 44 pertaining to the administration of the Revenue Act of 1932.

H. R. 5040, long held up because of a controversy over the electrical energy tax amendment incorporated in it, also exempts from the import tax or permits refunds or credits on fuel oil which is sold for use as bunker oil for U. S. and foreign warships, and certain commercial vessels. This is to prevent ships plying between U. S. and foreign ports from refueling abroad thus depriving U. S. fuel oil sellers of a sizeable market.

Two-cent local postage on and after July 1, 1933, was also provided in the measure. Another saving for oil companies was the transfer of the 3 per cent electrical energy tax from the consumer to the producer. The effective date of the electrical tax transfer is Sept. 1, 1933. The date was set late to give utilities companies an opportunity to seek revision of their rates before Sept. 1. Rates are under local or state control and few revisions to cover the tax are likely.

It was the electricity tax feature of the bill which made it appear doubtful up to late June 9 that the measure would pass. There had been no controversy over the merits of the relief needed by the oil industry but differences between House and Senate nearly wrecked the bill several times.

The amendment pertaining to the tax free oil and gasoline sales follows:

"Effective fifteen days after the date of the enactment of this act, section 620 of the Revenue Act of 1932 is amended to read as follows:

Sec. 620, Tax Free Sales.

"Under regulations by the commission with the approval of the secretary, no tax under this title shall be imposed with respect to the sale of any article—

"(1) for use by the vendee as a material in the manufacture of, or as a component part of, an article enumerated in this title;

"(2) for resale by the vendee for such use by his vendee, if such article is in due course so resold;

"(3) for resale by the vendee to a state or political subdivision therof for use in the exercise of an essential governmental function if such article is in due course so resold.

"For the purpose of this title the manufacturer or producer to whom article is sold under paragraph (1) or resold under paragraph (2) shall be considered the manufacturer or producer of such article. . . . . .

"Effective fifteen days after the date of the enactment of this act section 601 (c) (1) of the Revenue Act of 1932 is amended by adding at the end thereof the following:

"Under the regulations prescribed by the commissioner, with the approval of the secretary, no tax shall be imposed under this section upon lubricating oils sold to a manufacturer or producer of lubricating oils for resale by him, but for the purposes of this title such vendee shall be considered the manufacturer of such lubricating oils."

A paragraph (3) is added to 621 (a) pertaining to granting of refunds or credits on taxes. This amendment permits refunds or credits:

"(3) To a manufacturer, producer or importer in the amount of the tax paid by him under this title with respect to the sale of any article to a dealer, if the manufacturer, producer, or importer has in his possession such evidence as the regulations may prescribe that (A) such article has after the date this paragraph takes effect been delivered by the dealer to a state or political subdivision thereof for use in an essential governmental function and (B) the manufacturer, producer or importer has repaid or agreed to repay the amount of such tax or has obtained the consent of the dealer to the allowance of the credit or refund."

A section 630 is added as follows:

"Under the regulations prescribed by the commissioner, with the approval of the secretary, no tax under this title shall be imposed upon any article sold for use as fuel supplies, ships' stores, sea stores, or legitimate equipment on vessels of war of the United States or of any foreign nation, vessels employed in the fisheries or in the whaling business, or actually engaged in foreign trade or in trade between the Atlantic and Pacific ports of the United States or between the United States and any of its possessions. Articles manufactured or produced with the use of articles upon the importation of which tax has been paid under this title, if laden for use as supplied on such vessels, shall be held to be exported for the purpose of section 601 (b)."

Lubricated Gasoline Tax Ruling is Issued

WASHINGTON, June 12.—Jobbers or dealers who mix oil with their gasoline to sell a lubricated gasoline are not "manufacturers or producers" under terms of the Revenue Act of 1932 and hence cannot buy the two products tax free. This is a new ruling by the Commissioner of Internal Revenue made in response to an inquiry by Fayette B. Dow, counsel for the National Petroleum Association and the Western Petroleum Refiners Association.

Refiners manufacturing lubricated gasoline are required to pay 4 cents per gallon on the lubricating oil mixed with the gasoline and 1.5 cents per gallon on the gasoline content of the mixture. Under this procedure double taxation will be avoided.

Producers United in Plea for Lower Allowable in East Texas

By Paul Wagner
N. P. N. Staff Writer

By Telegraph
HOUSTON, June 12

TESTIMONY regarding alarming pressure declines in East Texas under the present high rate of production was given before the railroad commission June 12 by producing companies seeking lowered allowable in interest of the conservation of the flowing life of wells. Independents and major companies alike presented united front at the Austin hearing asking reduction from present allowable of approximately 826,000 barrels daily and hoped cut could be to as low as 500,000 barrels.

The commission in the past has appeared committed to high allowables and there is still doubt whether lowered production will be sufficient should it materialize to greatly help situation as compared with present or to stop the rapidly dissipating pressures that soon will wipe out the field's flowing well reserve.

Incomplete preliminary reports of gauges on 202 "key" wells made by commission up to June 8, were said to indicate reduction in average flowing capacities of 8.6 per cent and a bottom hole pressure decline averaging 2.8 per cent. Reports of commission and some of the companies were contradictory, however, the commission figures being materially lower.

Testifying before the commission, Monday, J. D. Dillard of the Pilot Oil Co., said 31 wells under his supervision showed a decline of closed-in pressure from 252 pounds to 189 pounds from April 1 to June 1, and further declared flowing pressure dropped from 121 to 74 pounds. The average drop of closed-in-pressure he said, was 28.9 per cent, flowing pressure 38.8 per cent and hourly flow 48 per cent.

J. L. Hicks, Houston Oil Co. of Texas, testified the average closed-in pressure decline of 52 wells under his supervision in May was 15.2 per cent. T. H. Herring, Yount Lee Oil Co., testified to a 17 per cent decline in flowing pressure during May in his company's 184 wells in Gregg county part of the field. O. H. Myers, Cranfill-Reynolds Oil Co. testified flowing pressures of his company's wells dropped 20 per cent from April 26 to June 9, and hourly production potentials declined 35 per cent. G. C. Jackson of Shell Petroleum Corp., testified it now required an hour and a half to produce the production allowable previously taken from his company's 167 wells in an hour. Mr. Jackson estimated the drop in tubing pressure of Shell wells at 15 per cent.

Apparently the greatest hope of a reduced East Texas allowable will come from the lowered potential of field as calculated arithmetically by the commission on the basis of key well tests. When the field was reopened April 25, the commission calculated this potential at 126,000,000 barrels plus daily. On the basis of present figures similarly calculated this may be cut to approximately 100,000,000 barrels. The ridiculous character of this is indicated by the fact that the industry at present is attempting to ascertain the truth of reports that 1000 to 3000 out of approximately 10,250 completions now will not flow.

The practice of many companies taking full allowable cut of a few wells on a lease that will flow, leaving wells that won't flow closed in, makes it almost impossible for scouts to determine how many pressure wells there now are in comparison with those that will only pump.

Gordon Griffin, the commission's own engineer, testified there would be a substantial improvement in bottom hole pressures if the allowable were decreased to 10 per cent of the hourly potential instead of the present 15 per cent. Mr. Griffin testified the average bottom hole pressure in May was 1313 pounds, and on June 8 was 1240 pounds. He declared production at 450,000 barrels daily would conserve producing energy of field, but made no recommendations as to that or any other quantity.

Operating interests made recommendations of total field allowables varying from 400,000 to 500,000 barrels per day.

Daily Average Production, Important Districts, American Petroleum Institute Figures

	Week Ended June 10 Barrels	Week Ended June 3 Barrels
Okla. City	180,700	123,750
Total Okla.	454,950	401,150
East Texas	836,800	837,500
Total Texas	1,394,400	1,412,050
California	475,300	477,300
East of Rockies	2,234,050	2,198,350
Total U. S.	2,709,350	2,675,650
Crude Imports	76,000	69,140
Total New Supply	2,785,350	2,744,790

Denver P. & R. President Dies at Okla. City

OKLAHOMA CITY — Frederick G. Shreves, president of the Denver Producing & Refining Co., died June 9, in Oklahoma City, following a heart attack. He was 70 years old.

Mr. Shreves was one of the pioneer refiners of the Mid-Continent. Born in Warren county, Pa., he spent his early manhood in the oil fields of Pennsylvania. He was superintendent of the Cornplanter refinery at Warren for eight years.

With the discovery of Illinois fields, he went to Lawrenceville and established the Central Refining Co., now part of the Indian Refining Co. With the discovery of Cushing, Mr. Shreves built the Consumers Refining Co., which he managed for four years.

His work in recent years has been in production. The Denver P. & R. owns substantial properties in Oklahoma City, where Mr. Shreves has lived since 1930.

Standard of Ohio to Base Gasoline Prices on Oklahoma Market

By J. P. Mosher, Jr.
Manager, Platt's Oilgram

CLEVELAND, June 13

STANDARD OIL CO. of Ohio has joined the ranks of Standard companies who have revised their wholesale and retail gasoline price structures so that they rest upon—and move up and down with—tank car prices.

In an announcement dated June 9 the Ohio company set up a revised price structure based upon the then prevailing tank car price for gasoline in Oklahoma. The new structure is to become effective June 14.

Standard of Ohio follows the current trend toward the narrowing of dealers' margins although in its new structure the reductions are not as marked as is the case in the new policies adopted by some other Standard companies. Likewise the Ohio company goes half-way in sharing lowered margins with authorized agents and dealers in areas where markets become depressed below the statewide structure.

The company adopts for the first time a form of Q. D. A. to contract tank wagon customers and also offers 2 cents off the posted service station price to all classes of cash customers. Earlier this year a 1-cent cash discount was in effect throughout the state but this was short-lived.

In its new price structure Standard of Ohio is establishing a base price which will be the tank car delivered price for regular gasoline effective throughout the state. This base price will be the low of the price for 65 octane gasoline in the Oklahoma refinery market as published by PLATT'S OILGRAM, plus 2.25 cents per gallon. The freight from Group 3 to all points in Ohio is over 3 cents a gallon so that in fixing its base price the company apparently is taking into consideration other competitive refinery districts.

Third-grade gasoline (59 octane and below) will have a base price 0.25 cent lower than regular. From the base prices, prices to various classes of the company's customers are determined as follows:

Standard jobbers will pay the base price.

Controlled dealers will pay a net price of 2 cents above the base price for regular gasoline. This cost figure includes all rental allowances. Open dealers (uncontrolled) and commercial tank wagon consumers will pay the base price plus 2.5 cents for regular gasoline.

Posted service station price will be the base price plus 7.5 cents.

A 2-cent discount from posted service station will be allowed for cash at all company-owned and operated service stations and at authorized agents on Ethyl, X-70 and Renown Green to all classes of customers.

Commercial consumers buying at service stations on credit will pay the cash price. Non-commercial credit customers will pay the posted price. Coupon books will sell for net cash only.

Posted tank wagon on regular gasoline in the new schedule is fixed at 3 cents under the posted service station price.

A Q. D. A. will be allowed to contract tank wagon customers. Buyers of up to 6250 gallons per month will pay the open dealer's price, or the base price plus 2.5 cents; this is 2 cents under the posted tank wagon. Buyers of 6250 to 25,000 gallons per month will pay the controlled dealer's price, or the base price plus 2 cents a gallon; this is 2.5 cents under posted tank wagon. Buyers of over 25,000 gallons per month will pay 1 cent less than the open dealer's price, or the base price plus 1.5 cents; this is 3 cents under posted tank wagon. Consumer Q. D. A. contracts will be subject to cancellation on 10 days notice.

Prices which the Standard of Ohio will post June 14 unless the new federal tax becomes effective that day are as follows. (Prices of Sohio Ethyl in all cases will be 2.5 cents higher than X-70)

	5c tax included X-70	5c tax included Renown Green
Posted Service Station	18.25	16.5
Posted Tank Wagon	15.25	13.75
Net Service Station Cash Price	16.25	14.5
Net Cost Tank Wagon Delivery to Open Dealers & Commercial Buyers of up to 6250 gals. per month	13.25	12.0
Net Cost Tank Wagon Delivery to Authorized Agents, including rentals, and to Commercial Buyers of 6250 to 25,000 gals, per month	12.75	12.5
Net Cost Tank Wagon Delivery to Commercial Buyers of over 25,000 gals. per month	12.25	
Tank Car (base) Price to Jobbers	10.75	10.5
Ditto, ex tax	5.75	5.5

In the new structure, uncontrolled dealers will find their margins unchanged. Controlled dealers will find their margins reduced 0.5 cent on both regular and third grade gasolines. Previously all tank wagon contract consumer-buyers got 2 cents off the posted tank wagon; in the new schedule buyers of up to 6250 gallons will continue to get this discount; buyers of 6250 to 25,000 gallons per month will get 0.5 cent larger discount and buyers of over 25,000 gallons per month will get 1 cent larger discount than they did formerly.

In areas where prices become depressed below the statewide structure, Standard may share lowered margins equally with jobbers down to 4.5 cents, and with authorized agents and dealers but not below the point where authorized agents overall margins, including rentals, equal 2.5 cents, 2.5 cents and 1 cent on Ethyl, X-70 and Renown Green, respectively; or dealers margins below 2 cents, 2 cents and 0.5 cent, respectively. The company however, reserves the privilege of not protecting individual jobbers, authorized agents, or dealers.

The tank wagon price to com-

mercial consumers in depressed areas always will equal the local tank wagon price to the open dealer.

Garages in the future will get the open dealer tank wagon price and not be subject to lease and agency agreements. Hauling contracts or yard prices will be abolished although the company may employ strictly commission salesmen on trucks carrying the full company insignia.

The company starts June 14 to put the new price structure into effect, and "all contracts at variance with the above policies will be brought into line not later than midnight, June 30, 1933."

Humble Elects Vice Presidents

By Telegraph

HOUSTON, June 13.—Three new vice presidents who were already directors were elected at a reorganization meeting of the Humble Oil & Refining Co. June 12. They were Edgar E. Townes, who is now vice president and general counsel; Wallace E. Pratt, land and geological vice president, and John R. Suman, production vice president. Harry C. Wiess continues as executive vice president and James Anderson, vice president in charge of crude oil sales and storage.

R. L. Blaffer, who was elected president last week, to take the place of W. S. Farish, who became chairman of the Standard Oil Co. (New Jersey) retains his old position as treasurer.

Walter W. Fondren and Frank P. Sterling resigned as directors and vice presidents and John S. Bonner as a director.

James Wallace Heads Oil Accountants On Coast

LOS ANGELES, June 13.—At a meeting of the board of directors of the Petroleum Accountants Society June 5 at Los Angeles, James Wallace, Richfield Oil Co. of California, was elected president. Other officers elected were: R. Paul Huggins, Western Gulf Oil Co., first vice-president; Fero Williams, Geo. F. Getty, Inc., second vice-president; and Roy H. Hornidge, Union Oil Co. of California, secretary-treasurer.

New directors elected to serve for three years are Mr. Hornidge, D. S. Kilgour, California Oil & Gas Association; and R. L. Minckler, General Petroleum Corp. of California.

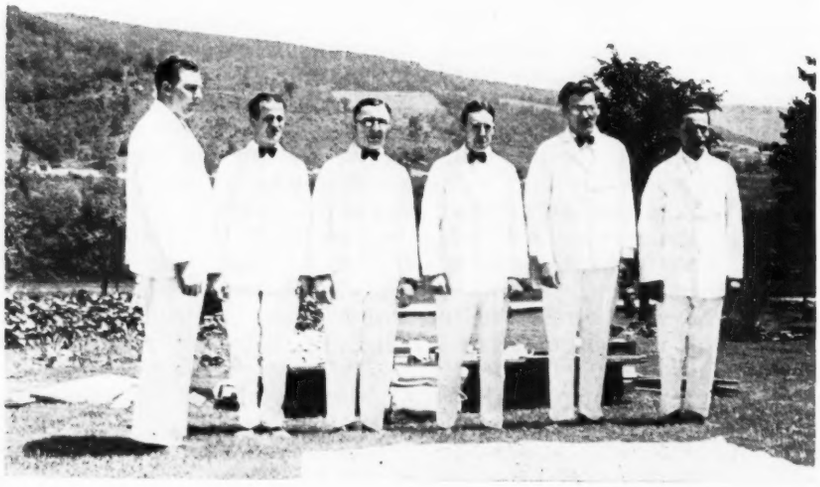
Kendall Refining Co. Team Wins First Aid Contest

CLEVELAND, June 12

KENDALL REFINING CO.'S No. 1 first aid team won first place in the annual first aid contest of the Fire and Safety Marshals' Association of the National Petroleum Association at Bradford, Pa., June 2.

The Kendall team amassed a total of 1977 points out of a possible 2000. It thus will be awarded the National Petroleum Association plaque.

The first aid team of Standard Oil Co. of Ohio's No. 2 works at Cleveland won second place with a score of 1966 points. Last year the Standard team took first place nosing out Kendall by a small margin.



Above, Kendall Refining Co.'s No. 1 first aid team which won the National Petroleum Association first aid contest plaque at the annual contest at Bradford, Pa., June 2. Left to right L. L. Akerlind, Harold Krantz, B. W. Herman, Fred McFadden, S. M. West and A. L. Dininny

Left, Standard Oil Co. of Ohio No. 2 works team which won second place in the annual first aid meet. Left to right Richard Graham, John Esson, Joe Kamerowski, Tom Looby, George Koelliker and L. Pence

Oklahoma City Producer Strike Forces Buyers to Scramble for Crude

By Lawrence E. Smith
N. P. N. Staff Writer

TULSA, June 10

THE current scarcity of crude oil in Oklahoma was further emphasized this week when Carter Oil Co., producing and purchasing subsidiary of the Standard Oil Co. of New Jersey, notified the state corporation commission it must have additional oil from Oklahoma, otherwise it will turn to East Texas for its supply.

It renewed its request for 25,000 barrels daily from the Oklahoma City field, asked for 15,000 additional from the Seminole district and for 5000 additional from other prorated areas of the state.

It nominated for June 25,000 barrels, at the hearing late in May, an increase over what it had said in April it wanted in May. But that increase, along with the increases of other purchasers, was, in effect, disallowed when the commission extended the May order to cover June. The current allowable at that time was left at 159,000 barrels daily.

Were the Carter able to buy the 25,000 barrels in Oklahoma City it asked for, or even the 13,500 barrels it nominated for May, it would not be asking for as much increase from Seminole and other prorated pools. But, as explained to the commission on June 9 by James A. Veasey, vice-president and general counsel, it is not getting much oil from Oklahoma City. It has been able to get an average of only 3000 barrels daily in June; some days it has no runs at all. In May it averaged slightly more than 4000 barrels daily, while in April it bought and ran through the affiliated Oklahoma Pipe Line Co. system about 11,000 barrels daily.

Mr. Veasey told the commission the company requires 65,000 barrels daily. It runs no oil from Kansas. The company is meeting its deficiency in supply by drawing on its storage. It took out an average of 18,000 barrels daily in May; thus far into June it had been drawing out 30,000 barrels daily. Its storage position is not good, as it has only about two million barrels. More than two years ago, in line with the general policy of the New Jersey group, Carter set out to reduce its large stocks.

In the telegram to the commission which preceded the appearance of Mr. Veasey before that body, the company said that it must immediately increase its present purchases 20,000 barrels daily to fulfill contract requirements. Under contracts made in 1930, ending in 1935 with renewal clauses, Carter must supply via the Oklahoma Pipe Line Co. and the Ajax Pipe Line Co. "large amounts" to other states and to Canada. It told the commission that serious penalties would be incurred through failure to deliver oil it had agreed to supply.

The customers supplied by the Carter include Standard Oil of Ohio, Pure Oil Co.—both of whom own interests in the Ajax Pipe Line Co.—and Imperial Oil, Ltd. The oil moves through connecting carriers to plants of the Standard Oil Co. of Ohio at Cleveland, Lima, Toledo and Latonia, Ky., to Pure Oil refineries at Toledo and Heath, O., Cabin Creek, W. Va., and to the Imperial plant at Sarnia, Ont.

The commission was told that the Carter had always paid the full market price for oil and that it had at numerous times bought more oil than it needed. It believed it should be given consideration now that the situation is reversed and it is in the position of needing more oil than it can get under present allowables of the commission.

Its shortage is due primarily to the "strike" of Oklahoma City producers. This has existed since the price was cut to 25 cents. There is, after all, plenty of allowable in that field. Notwithstanding that the commission turned down the nominations of 237,000 barrels by purchasers over June and held the current allowable to 159,000 barrels, there is a considerable quantity of "back allowable" which operators can produce and sell if they desire.

IT WOULD be possible, legally, to take out of the field in the form of current and back allowable as much or more than the 237,000 barrels daily nominated at the close of May. Carter owns no properties in the field. The granting of an increase in allowable in Seminole and other prorated pools would help it, for additional oil could be obtained from its extensive holdings.

Mr. Veasey insisted that the company must have an answer by June 15. The three commissioners conferred, announced they would formally consider the application on June 27, on which day they have said they will hear several other proration matters. Mr. Veasey reiterated that the company must have its answer by June 15. Commissioner Jack Walton wanted the record to show that he favored granting the increase.

Carter companys' alternative is to go to East Texas. It told the commission it preferred to get its oil in Oklahoma, that if forced to go to Texas it would have to commit itself over an

extended period to keep on taking oil and some more of Oklahoma's market would thus be lost.

It would, presumably, deal with the Humble Oil & Refining Co. for East Texas oil. That would mean that Humble Pipe Line Co. would have to lay an additional line paralleling its present system which goes from the Van pool to Louisiana, carrying both Van and East Texas crude. The capacity Humble has eastward for East Texas oil is now taken up by Standard Oil Co. of Indiana and Standard Oil Co. of Louisiana. The Indiana company is moving 10,000 barrels daily eastward through the Humble line, thence through Standard of Louisiana line to connection with the Oklahoma Pipe Line Co. which delivers the oil to the Stanolind Pipe Line Co. in Oklahoma. Oklahoma pipeline has plenty of capacity to move oil from East Texas to Glenpool, Okla., where the Ajax would pick it up for movement eastward.

Mr. Veasey suggested the appointment of a committee of producers and purchasers to investigate and report on market demand for Oklahoma oil. The commission declined to name such a committee but said it would be glad to receive suggestions from such a body, should the industry make its own survey.

Nearly 100,000 barrels daily of East Texas oil are now moving directly into territory normally tributary to the Oklahoma and Kansas fields. Gulf interests bring 22,000 barrels daily northward, transfer it at Glenpool to the eastward going Gulf Pipe Line Co. of Pennsylvania system. The Texas Co. moves some 16,000 barrels daily. Sinclair Prairie and Globe Oil & Refining Co. are others who take part of their Mid-Continent and Chicago district refinery requirements from East Texas.

Several other Mid-Continent refiners need oil and are running at less than their needs to supply the trade. Some are buying gasoline from East Texas, where the supply available is growing less. One large company in Oklahoma is soliciting connections in this state, offering to buy half the amount turned to its lines at the present price and store the balance free of cost to be purchased when and if the price advances.

Oklahoma City production jumped 92,000 barrels daily average for the week ended June 7, compared to the previous week, reaching a mark of 171,000 barrels. This does not coincide as to date with the American Petroleum Institute figures, and probably will not as to amount.

The increase came about through haste of several producers to take their June allowable production, anticipating that the corporation was going to issue the proposed order shutting in everything in the state to the statutory 25 barrels per day, exempting only wells making 10 per cent or more of water. This matter was postponed, however, to June 27.

On that day the commission will also hear the petition of the Champlin Refining Co. This company has caused summons to be issued for the appearance of executives of nearly all the important producing companies and it will attempt to establish its contention that there is now no need of proration in Oklahoma except on the Wilcox sand wells in Oklahoma City. It believes that even these flush wells would be better handled simply by setting a maximum gas/oil ratio than by prorating.

Attack on Oklahoma's recently enacted proration law was instituted in the state supreme court by the Sterling Refining Co., which has a plant near the field. It was joined in this by the Refiners Production Co. The latter company owns two wells in the field whose combined monthly allowable is 11,000 barrels.

The two companies recently asked the commission to permit them to take 5000 barrels daily from the two wells, asserting that it was unable to get this amount elsewhere in the field. This request was refused. In the petition to the court the companies attack the validity of the law and seek an order permitting them to take the 5,000 barrels daily from their wells.

Shell Petroleum Corp. is another company in need of more oil from Oklahoma and on June 30 the commission will hear its application for greater allowable production from the Lucien, or Wentz, pool. This is near Perry, Okla., and the four wells operated by Shell on a unit development block and one outside well have been restricted to 50 barrels per day each. Shell asks permission to take 12,000 barrels daily. It has started construction of a 26-mile six-inch line from the pool to its main system.

Overfilled Tank Given As Explosion Cause

LOS ANGELES, June 9.—Cause of the explosion and fire that completely wrecked a Richfield absorption plant at Signal Hill last week, brought death to nine persons and injured many more, was attributed to the failure of a tank over-filled with gasoline.

It was revealed that absorption plants are under neither state nor government supervision and the inquest jury recommended future construction and operation of pressure vessels in the oil fields be supervised by the State Industrial Accident Commission.

Some ten witnesses gave testimony to the effect that prior to the blast a cloud of gas was seen to form in the air above the plant. The verdict, returned by a jury of men, all with experience in the oil industry, said:

"We believe that the explosion and subsequent fire was a result of the initial failure of a horizontal steel storage tank for unstabilized casinghead gasoline, known as tank No. 4, and that this failure was due to overfilling said tank, thereby releasing its contents, which were subsequently ignited, causing the major explosion.

"We believe the overfilling of the storage tank was the result of an operating error, coincident with a condition of unusual shortage of storage capacity for unstabilized gasoline occasioned by a shutdown for repairs of stabilizing equipment during the previous 24 hours, prior to 10:30 a.m. on last Friday, the day of the explosion."

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Blaffer Heads Humble Farish is New Chairman of Standard of New Jersey

By Paul Wagner
N. P. N. Staff Writer

Photo by Blank Stoller, Inc.
Robert Lee Blaffer

HOUSTON, June 9 ACCESSION of William Stamps Farish to the chairmanship of the board of directors of the Standard Oil Co. of New Jersey has been followed by the election of his lifelong associate, Robert Lee Blaffer, as president of the Humble Oil & Refining Co.

Mr. Farish resigned as president of the Humble, in which the New Jersey company owns approximately a 78 per cent stock interest, immediately after his election to the new post, June 6. Mr. Blaffer's election to succeed him followed.

Harry C. Wiess, formerly refinery vice-president, was named executive vice-president. The post of treasurer, formerly held by Mr. Blaffer, was not immediately filled. A vacancy on the Humble board of directors, created by Mr. Farish's resignation, remains open temporarily.

Election of Mr. Farish to the Jersey company chairmanship fills a post vacant since the death of George H. Jones in 1928. Before Mr. Jones, the chairmanship was held by the late Alfred Cotton Bedford, wartime head of the Jersey company and chairman of the National Petroleum War Service Committee.

It was as a member of the war service committee representing South Texas that Mr. Farish first met Walter C. Teagle, president of the New Jersey Standard. Later he interested Messrs. Bedford and Teagle in the Humble Oil & Refining Co., which in 1917 brought together properties previously operated separately by the R. S. Sterling interests, the Farish & Blaffer partnership, Harry C. Wiess and others.

Owning vastly important properties but handicapped in their development, the old Humble Oil & Refining Co. sold a half interest in the reorganized corporation to the Standard of New Jersey, doubling the capitalization and using the newly acquired finances for expansion. From a $4,000,000 company in 1917 to a $75,000,000 corporation with unmeasured crude oil reserves and a capital investment running into the hundred of millions has been a result of the Humble's expansion throughout Texas.

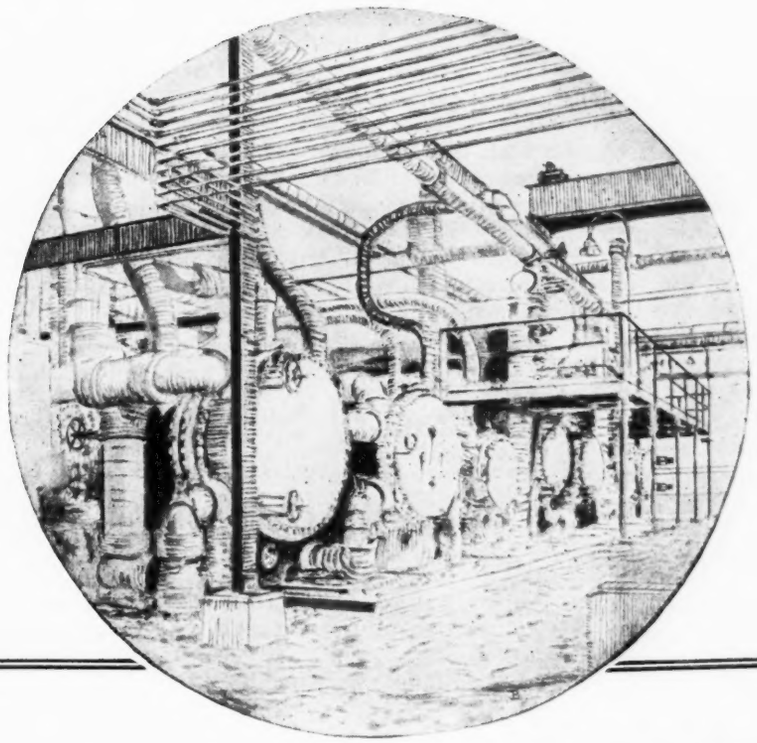
Mr. Farish became president of the Humble in 1922, on the retirement of R. S. Sterling, whose remaining stock interest in the company was acquired by the Jersey company at that time. Thereafter, Mr. Farish took an increasingly active part in affairs of the petroleum industry, serving as president of the American Petroleum Institute in 1926 and leading in the industry's conservation efforts for many years.

Few have attained greater industrial prominence in Texas than Mr. Farish. Under his direction the Humble company has steadily advanced to first position among producing companies in Texas. There is not a field in the state of consequence in which it does not have a substantial position; the total of its holdings and reserves easily surpasses that of any other company.

The attitude of Mr. Farish on problems that affect the oil industry is known to everyone who keeps pace with development. He has addressed numerous meetings, has been prominent in measures designed to effect a betterment of development and production practices. His has been one of the widely heard voices on the troublesome question of conservation. Always has he battled for the principle of regulating production to consumer requirements.

A company frequently invites attack because of mere bigness and the Humble has had its share of this kind of trouble in the turbulent state of Texas. Mr. Farish has participated in many a rough-and-tumble battle. His poise and seeming good nature in these encounters detract not at all from the vigor of his battling.

The election of Mr. Farish to the chairmanship of the Jer-



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sey company, which is considered by many to make him titular head of the American petroleum industry, will result in his removal to New York from Houston before the end of the month. Much of his time for the last year has been spent in the East, where, as a member of the board of directors of the Jersey company, he took an active part in its affairs. Until the present, however, he had not been an officer of the Jersey company.

Previous chairmen of the New Jersey company's board have been quite active in oil affairs, the job not being in any sense an honorary one. This is expected to be true in the case of Mr. Farish also, since reports are that Mr. Teagle is to be called by President Roosevelt to take an important part in his "New Deal" for American business and industry.

A veteran of the southwestern industry, Mr. Farish migrated to Texas in 1901, when the first flowing oil production was discovered west of the Mississippi river, on the Spindletop salt dome, near Beaumont, in the Gulf Coastal region.

He was three months out of the University of Mississippi, having abandoned a short law practice at Clarksdale, in order to join the rush to Texas. He is a native of Mayersville, Miss., where he was born in 1881.

In 1902, Mr. Farish joined with Mr. Blaffer in a partnership which continued until the merger of their properties with those of Mr. Wiess, Mr. Sterling and others in 1907, to be followed later by the reorganization that linked the Humble and Jersey companies through a stock ownership.

Mr. Blaffer, a native of New Orleans, born in 1875, is a member of an old Southern banking family. He originally went to Beaumont for the Southern Pacific system, but soon resigned to engage in the crude fuel business, supplying this railroad and Louisiana sugar refining interests prior to the later organization of the Rio Bravo Oil Co. as an oil subsidiary of the Southern Pacific.

Mr. Wiess, a native of Beaumont, where he was born in 1887, was graduated from Princeton in 1909 with a civil engineering degree, after which he took up management of oil interests owned in the family. He was president of the Paraffine Oil Co., and other producing interests, before their merger with the Humble.

Messrs. Farish, Blaffer and Wiess all married in South Texas.

Mrs. Farish is the former Miss Libbie Rice, daughter of David Rice, cotton factor and pioneer Houstonian; Mrs. Blaffer is the former Miss Sarah T. Campbell, daughter of the late W. T. Campbell, one of the organizers at Spindletop of the Swayne-Hogg Syndicate, which was the forerunner of The Texas Co., in later days; Mrs. Wiess is the former Miss Olga Keith, daughter of the late J. Frank Keith, Beaumont lumberman and business leader.

Bureau of Standards Men Conduct Tests on Alky-Gas Blends

WASHINGTON, June 12

FIVE automobiles operated by employes of the U. S. Bureau of Standards were used June 9 in a test of the efficiency of alcohol-gasoline blends, under direction of the contest board of the American Automobile Association. Results will be announced later.

The tests were to check previous A.A.A. tests which had been questioned by Representative Dirksen, of Pekin, Ill., a proponent of alky-gas. In the previous test A.A.A. officials found a loss of 6.5 per cent in efficiency with 10 per cent blends which was calculated to cost motorists $609,000,000 yearly if alky-gas should be required by law.

Mr. Dirksen and other members of Congress were invited to observe this test.

The Bureau of Standards was asked to and did furnish the men needed to operate the cars in which observers for the association, and others rode. The drivers did not know upon what fuel they were making the runs. All they had to do was to open the throttle and "let her roll" except that they had to shut off the special metric system graduated and calibrated tubes from which came the fuel when the car was passing back and forth over the measured mile. Four cars, using fuel from tanks furnished and marked by the Bureau of Standards, ran round and round over a 10-mile loop. Their drivers had to cut off their fuel from the tanks furnished by the Bureau of Standards only when they left the 10-mile loop. Each car made a round trip on each carburetor setting so as to take care of windage.

Five carbureter settings were used, from a very lean to a very rich mixture with each kind of fuel, the aim at all times being to keep up a speed of 45 miles an hour—the legal limit in the country around the national capital.

Prior to the start of the road tests, the parties making them called at the Department of Agriculture to tell Secretary Wallace and Assistant Secretary Tugwell, in person, the program that had been laid out and afford them an opportunity to suggest changes if they could think of anything tending to make the test more accurate.

Observers, in addition to those designated by the Bureau of Standards and the A.A.A., invited by the latter were Dr. J. F. T. Berlinjer, representing the DuPont interests; Dr. Leo M. Christianson, representing Iowa State College; T. F. Piccerelli, consulting chemist, New York; S. Berin, Tidewater Oil Co.; and Prof. G. G. Brown, University of Michigan.

Dr. H. C. Dickinson, chief of the heat and power division of the Bureau of Standards, who is also president of the Society of Automotive Engineers, made the assignments of men from the bureau to help in the running of the tests.

Dynamometer tests were run on the cars used in making road tests at the Bureau of Standards on June 10 so as to obtain the horsepower developed by each sort of fuel.

Pumping East Texas Will Handicap The Shoestring Operators

By W. F. Lowe
N. P. N. Staff Writer

TYLER, TEXAS, June 9

FLUSH production in East Texas is about to disappear but its potential production by artificial means is enormous. Paraphrasing Irving Berlin, the song is about ended but the melody will linger on and on.

In other words, East Texas must not be too greatly discounted even if its formation pressure is dropping at the rate of four pounds per day, and the field as a whole can stand only about 250 pounds further drop before its wells go on the pump. There is reason to believe this condition will actually exist by late summer.

After that time, however, at least 7000 of the total 10,000 wells now on production will each be capable of making 100 barrels per day for the next two years.

Of course, a change in the administration of proration in the field, with a reduction in the volume of oil that can be taken from the ground, would lengthen the time during which it will flow.

However, when the wells of this great field cease flowing, the general condition of the industry is likely to show signs of improvement. The temperature of "hot oil" will be lowered at once and many disturbing producing and marketing practices terminated.

These changes will be due to the difference in the costs of producing oil by natural flow and by mechanical lift.

The amount of the difference will vary with the character and age of the well beyond the flush stage. In East Texas the lifting cost per barrel may begin at one or 2 cents for wells that are properly equipped and at 5 cents for those rigged with make-shift materials. The rise in cost from the stage of easy skimming operations to the point where a considerable volume of water must also be handled is fairly steady until the good operator is paying from 10 to 15 cents per barrel and others as high as 25 cents.

It is obvious that the production advantage which the shoestring operator enjoyed during the flush period will shortly swing to the better operator as the artificial lifting season begins. So long as the wells flow, the inexperienced operator could, and did, sell at any price just to get a cash return.

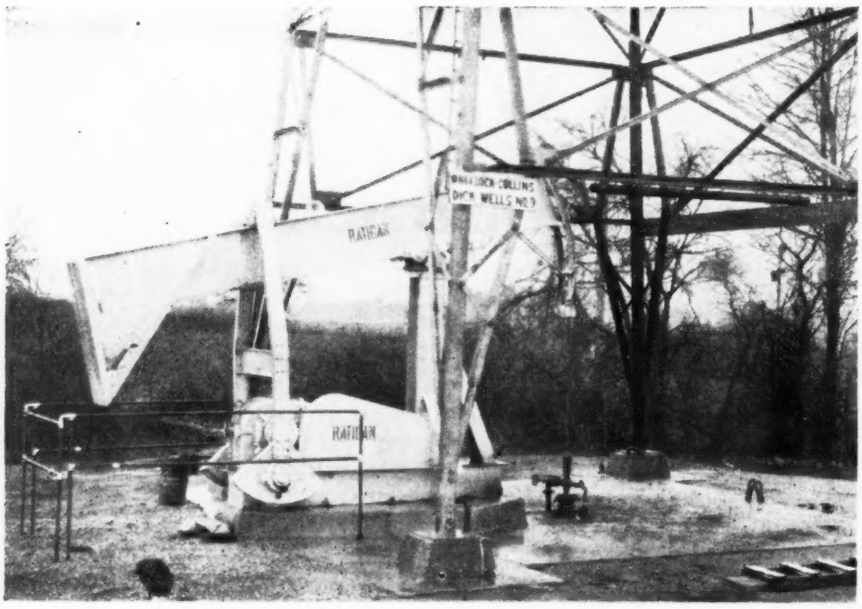
This type of operator will find that breaking the market with oil that carries a lifting charge is a decidedly different matter. To pump his wells he must first increase his average investment in each well by at least $1500, and this covers only the bare essentials for the easy pumping stages. Such equipment would consist of a small prime mover of low horse power rating, with a crank take-off for operating a pumping jack on a neighboring well. The pumping stroke on the first well would have a maximum length of 49 inches, while that of the second would be but 37 inches; thus the fluid capacities through 2-inch tubing would be about 250 and 150 barrels per day respectively.

Such equipment might serve for a considerable period, while the fluid columns stood high in the wells and so long as water was not being handled in addition to the oil. However, even during this easy period, the second most serious problem in the field, that of paraffin deposits, will necessitate numerous rod and tubing pulling jobs. The equipment mentioned above is too light for such work and it must either be done by contracting, or a mobile unit for the purpose must be purchased. Contract service is likely to cost from $25 to $150 per job, depending upon the number called for and complexity of each, while a truck or tractor and winch outfit may cost $3000 or more. The combination of all of these things is what goes into the producing charge known as lifting cost.

WITH the advent of water, the pumping capacity of these units is likely to prove entirely inadequate in handling the fluid volume necessary to maintain oil production on a profitable basis. It is at this point that the shoestring operators, as a group, will definitely make their departure. They will not have the money to replace their light units with better and more powerful equipment.

Just how soon this will take place is a matter of conjecture. Even the large operators are not in agreement on the water situation except as to its eventual huge volume. It is known that there are some 300 wells making water at the present time and some 300 more are thought to have unreported showings. The rapid drop in pressure indicates that many more will be cutting water within a few months, particularly along the west side of the field, for the differential pressures set up as the wells go dead and are placed on the pump will result in water coning.

The difference of opinion among the large operators on the water question is noticeable in their choice of pumping equipment. One major oil producing company is installing complete standard rigs on all



One of the smaller pumping units in East Texas electrically operated through reduction gears by a 20 h.p. motor. This well is on the east side of the field and has been on the pump for nearly a year

of its wells, regardless of their location. These are powered with gas engines of 40 h. p. rating. They are completely self-servicing, even to cable tool clean-out work and they cost about $6600 installed. Their pumping capacity ranges up to about 1000 barrels of fluid per day, thus the company is prepared to pump large volume of water to get out the oil. At least one other large operator is following this same program.

Two other major companies are adopting the large geared pumping units with standard walking beams, most of which will be operated by 20 h. p. electric motors. These electric units are not self servicing so the two companies are buying large trucks and equipping them with pulling machinery. The pumping units, complete with rods, etc., cost about $4360, while the heavy truck and pulling equipment averages around $3500 each. The small motors will handle only about 250 barrels of fluid per day but, since most of these are on the north end of the field, where water is not yet as noticeable as on the south, they will serve for a long time. Other motors being used are triple rated at 9-16 and 25 h. p., which have capacities up to 750 barrels of fluid.

On the south end of the field, one of these companies is putting in regular standard units, powered with 40 h. p. gas engines and with back cranks to take care of two additional wells. This company reasons that, if water takes the area suddenly, no further equipment need be purchased. Under the present arrangement the pumping investment per well is held to about $2100.

While everywhere there is preparation for the pumping that certainly must begin generally within a few months, there is no sign yet of plans for taking care of the huge supply of salt water that must come within the next year along with the oil produced in East Texas. This problem is one which all engineers are dreading, for there is at present no adequate solution. It is realized that it may be a large factor in determining the economic production limit of the pool.

Another factor which will raise the lifting cost is that of well cleanouts. Though in other pools of eastern Texas, which obtain their production from the Woodbine sand, notably Mexia and Corsicana, this practice was not a large factor, it is thought by several operators that this will not be the case in the East Texas field. This is because of the known high percentage of fine volcanic ash found in the Woodbine in East Texas. Some companies are already planning to use mobile clean out units, consisting of large mud pumps mounted on trucks for cleaning wells of cavings, by the rotary circulation method developed on the Gulf Coast. Similar units equipped with air compressors may use the blow-out method. Other operators believe little trouble will be experienced with cavings.

It is estimated there are at this time more than 1000 dead wells in East Texas. Approximately half of these are reported and listed, but, considering the fact that to report a well in this condition means that the allowable of that particular operator will be reduced, there must be many which are not listed.

When the rate of pressure drop under the present withdrawal of 1,000,000 barrels per day is considered, almost any estimate on the number of dead wells seems logical. On May 11 the average pressure in the field was 1313 pounds and on May 27 it was 1239 pounds, a drop of 73 pounds in 16 days, or at the average daily rate of 4.6 pounds. At the end of this period the average daily decline was 4.1 pounds, showing that the rate of decline was slowing down. This tendency to flatten out on the part of the pressure decline curve is an interesting phenomenon. However, the slowing down of the decline is thought to be coming too late to do the flowing period any real good.

It is quite generally conceded that most of the wells will quit flowing at a bottom hole pressure of 1000 pounds. There may be isolated cases where they will continue to flow when the pressure has dropped to as low as 800 pounds and some engineers contend that they could be flowed under proper conditions to as low as 450 pounds. It seems likely, however, that at least 90 per cent of the wells will be ready for or on the pump at 950 pounds. This leaves but 289 pounds leeway from the present average pressure of 1239 pounds. It is reasonable to assume that the average daily pressure drop during the period in which this excess pressure is being used will be in the neighborhood of 3.8 pounds, thus the general pumping stage will not be reached for better than two months.

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Engineering Report on East Texas Field

By Ellick Botts, Consulting Pumper, Gray Horse, Okla.

Subject: The East Texas Field.

This field is located in the eastern part of Texas, in an area formerly devoted to tomatoes, peaches, watermelons and to keeping the niggers in their place. It is a low, rolling country, heavily wooded with pine trees and other forms of flora. It abounds in animal life, such as mosquitoes, chiggers and lawyers with now and then an alligator. Cotton is one of the staple products of the region and some years the growers make nearly enough to settle up in full at the store.

The field itself is about 40 miles long and five miles wide. It is bounded on the west by Carl Estes and on the east by an interlocutory injunction. A receiver forms the southern end and the north closure of the structure is supplied by a contempt citation. There is one principal stream through the field, the Sabine river, along whose shores at eventide one may hide in the underbrush and watch the railroad commission deputies come to drink. They are shy and furtive, seldom being seen in the daytime, but their mating calls resound through the night.

Geology: The oil producing part of the field is monoclinal in structure and consists of a deposit of colored people laid down in the Eocene time. The surface formation consists of oil-payment paper from which the drill passes into a cavey bed of overriding royalties. Evidences of marine life are found as the drill moves downward, gastropods, trilobites, hormones and vitamines being especially profuse.

The oil-bearing formation is somewhat higher on the east than the west side, due to a rush of royalty buyers playing the west side in 1931. The tilting action thus produced has always confused geologists and is here explained for the first time. The Woodbine sand, in which oil was accumulated, thins toward the east where several of the big companies sit waiting for the water drive from the west to push the oil to their wells. This sand produces, besides oil, gas, water illegitimate heirs and the Independent Petroleum Association Opposed to Monopoly.

Producing Methods: Advantage is taken by operators of the natural water drive along the west side of the field to the extent of removing 10 barrels of oil for each barrel of water that can get in. In this way they avoid having to deal with salt water pollution of streams. Spacing of wells is varied, but general practice has been to get 10 acres, sell part interests to five people on the wife's side, get the railroad commission to grant five drilling permits, or exceptions to its spacing rule of one well to 20 acres. One well is then drilled to the Woodbine sand and four are drilled to depths of 20 or 30 feet. The shallow holes are fitted up to look like oil wells and cleverly concealed pipelines are run from the authentic well to the dummies. In that way, for the price of one well, the operator gets five allowables to violate.

Wells are drilled with rotary tools as quickly and as thickly as permits can be obtained from the Railroad Commission. The procedure in getting a permit is to rap three times and ask for Mike. Considerable delay was encountered at times in the granting of permits, as they had to be signed by hand. Time would have been saved for all had the commission installed an automatic vending machine and doubtless this will be done when the next big field comes in.

The commission wisely adopted a rule limiting drilling to one well on each 20 acres and this was strictly adhered to with the trifling exception of about 4800 wells.

The log of a typical East Texas well follows:

0-12 feet—Surface pipe set and deputy conservation agent appeased by telling him new type of ensilage cutter was being operated.

12-150 feet—Soft, shaly formations; opinion of three-judge federal court encountered at 113 feet.

150-212 feet—Some lime and shale with ancient statement of W. S. Farish on conservation at 197 feet, very hard drilling.

212-750 feet—Fast time made and 10-inch landed on top of writ of error from Rusk county district court.

750-1111 feet—Fresh water sands, alternating with threats of military shutdown.

1111-1655 feet—Temporarily delayed at latter depth for three days while crew acts as part of delegation to wait on legislature.

1655-2012 feet—More lime and traces of salt with numerous interruptions to electioneer for Railroad Commission candidates.

2012-2013 feet—Two new drilling permits granted by commission.

2013-3100 feet—Drilling slowly while bye-passes are being installed. Commission deputy told bye-passes were new type oil saver.

3100-3342 feet — Foundations poured on which to set boiler which will be converted into refinery. Writ of mandamus obtained compelling major company to buy allowable oil.

3342-3604 feet—Well completed at latter depth for 12,000 barrels daily. Loading rack in; meter installed, with bye-pass; bye-passes installed on re-

finery lines, tanks, royalty owners and minority partners. Bye-passes fitted on each other and everything working according to best practises of East Texas field.

Productive history of above well: Completed in July, 1931; production to date, slightly more than one million barrels; reported production, 115,312¼ barrels. Owner has been enjoined three times in state court and has enjoined commission in federal court three times, which leaves commission dormie two. With end of flowing life of well in sight, owner is maneuvering to get receiver appointed.

Oil Field Phenomena: The East Texas field has a number of peculiar conditions not common to other oil pools. It has come to be the permanent abode of the ignis fatuus, or will-of-the wisp and hundreds of people have spent the past two years in hot pursuit. They have invariably finished a poor second.

Another oddity of this field is "hot" oil. While this phenomonen is now observed in some other pools, East Texas first brought it into prominence. In some portions of the field the hotness of the oil has become so great that a heavy vapor hangs perpetually over the earth's surface. Automobiles operate directly on this oil fog, taking it in through the carburetor.

A major bye-product of the field is bottom-hole pressures. The taking of these has been a great boon in the past two years of unemployment, giving work to several thousand people. Principally these readings are used as evidence in the various hearings and court actions and by them either side of a given proposition is proved.

Chief effect of the East Texas development to date on the territory in which it is situated was to roll up an impressive vote for Jim Ferguson and to set an all time record in the number of injunctions within a given period.

The Texas Co. Sues Chalmette

NEW YORK, June 12.—The Texas Co. has filed suit against Chalmette Petroleum Corp. in the U. S. District Court at New Orleans alleging infringement of the Otto Behimer cracking patents, Nos. 1,840,012 and 1,-883,850.

Principles of Rectification

PART 4 – HEAT EXCHANGE

Methods for Determining Data Necessary in Arriving at Heat Transfer Surface and Other Factors—Expense of Operating a Heat Exchanger—Conduction, Convection and Radiation.

By George A. Burrell* and Nelson C. Turner*

THE method commonly employed today by construction engineers in installing heat exchange equipment is to calculate the duty required of a heat exchanger, to specify the type of service it is to be used for, and to accept the maker's design and surface area for the work; as a result of competitive bids supplied to various makers of the equipment.

There are manufacturers who have specialized through the years on heat exchange equipment and, as a result of hundreds of practical tests, have determined the best construction of equipment, the best velocities, and the rate of heat transfer, for oil to oil, water to oil, steam to oil types, and the like. Durability, accessibility, and ease of cleaning of their equipment have also received much attention.

In the design of an oil to oil heat exchanger one submits to these manufacturers the number of B.t.u.'s and quantities and character of the oil to be handled by the exchanger, the temperatures, the pressures, and the type of service for which it is to be used. The square feet of surface needed is determined from the B.t.u.'s to be transferred, the temperature difference, and the rate of heat transfer, thus,

$$\frac{\text{B.t.u.'s per hour}}{\text{M. T. D.} \times \text{heat transfer coefficient}} = \text{square feet of surface needed.}$$

M. T. D. = the mean temperature difference.

Assume that, in a natural gasoline plant, 200,000 gallons per day of oil, plus its absorbed gasoline, is to be heated from 80° F. to the highest possible temperature, by that same oil returning from the still minus its gasoline content. Also assume that the oil in the still has a temperature of 300° F. and is to be cooled by the heat ex-

*Burrell-Mase Engineering Co., Pittsburgh, Pa.

THE accompanying article—the fourth in the special refining series being written exclusively for NATIONAL PETROLEUM NEWS by Messrs. Burrell and Turner—takes up the principles of heat exchange. Valuable data is presented for arriving at factors necessary to determine heat exchange surface needed and so on.

Three earlier articles in this series published in NATIONAL PETROLEUM NEWS have been on the subject of, "Principles of Rectification." The first appeared in the March 22nd issue, the second in the April 19th issue, the third in the May 31st issue.

changer to 120° F. The gasoline in the oil is 10 per cent of the total volume, and one-half of this, 5 per cent of the oil, will be evaporated in the heat exchanger.

The heat in the hot oil returning from the still, available for heating the cold oil, is

$$\frac{200{,}000 \times 90 \times 6.18 \times 300 - 120^\circ \times .54}{24} = 4{,}505{,}220 \text{ B.t.u.'s per hour.}$$

200,000 = gallons per 24 hours.
90 = per cent.
6.18 = lbs. per gallon.
.54 = specific heat.
24 = hours.

Some of the heat will be used to evaporate part of the gasoline in the fat oil. This is,

$$\frac{.05 \times 200{,}000 \times 5.0 \times 120}{24} = 250{,}000 \text{ B.t.u.}$$

4,505,220 − 250,000 = 4,255,220 B.t.u. available to heat the cold oil.

This will heat the cold oil 168° F., thus,

$$\frac{4{,}255{,}220 \times 24}{200{,}000 \times 6.1 \times .50} = 168^\circ \text{ F.}$$

80° + 168° F. = 248° F.

The temperature differences become,

Fat oil in 80° F. Lean oil in 300° F.
Fat oil out 248° F. Lean oil out 120° F.

300°	120°
248°	80°
52°	40°

The logarithmic mean temperature difference is 47° F. The square feet of surface needed is,

$$\frac{\text{4,505,220 B.t.u.'s per hour}}{47 \times \text{overall coefficient of heat transfer}}$$

If it has been found in practice that a coefficient of the order of 60 B.t.u.'s per square foot, per hour, per degree F., is a suitable one, the surface becomes 1598 square feet.

In some cases the arithmetical mean temperature difference between substances may be used without introducing any substantial error in heat transfer calculations, because other errors are far beyond the one introduced by this means. Where the ratio of the smallest temperature difference to the greatest difference is large, i. e., near unity, but little error is involved. Where the ratio is small a larger error is introduced, and the logarithmic difference should always be used. The logarithmic mean temperature difference is obtained as follows:

$$\theta_m = \frac{\theta_a - \theta_e}{\log_n \frac{\theta_a}{\theta_e}}$$

Where θ_m = mean temperature difference.
θ_a = temperature difference at inlet of tube.
θ_e = temperature difference at outlet of tube.

A handy chart for determining the logarithmic mean temperature difference, prepared by the Griscom-Russell Company, is shown at Fig. 1.

To determine the overall heat transfer coefficient accurately from theoretical considerations alone is impossible; all manufacturers obtain certain practical data and then with the aid of theoretical considerations produce heat exchanges to meet varying demands.

The original equation for heat transfer by conduction was that of Newton,

$$\frac{Q}{\theta} = \frac{KA\,t}{L}$$

Where Q = the heat flow in time θ.
$\frac{Q}{\theta}$ = the rate of heat flow.
K = the thermal conductivity of the solid of which the wall is made, expressed in quantity of heat per unit area, per unit time, per unit temperature difference.
A = the effective area.
L = the thickness.

Thus the quantity of heat flowing through a conductor is proportional to the thermal conductivity of the body, to the area, and the time, and inversely proportional to the thickness of the body. The coefficient of heat transfer is expressed as B.t.u./square foot of area/degree F./hour, and is usually denoted by the symbol h. The symbol K is also frequently used, but this letter is better reserved for the coefficient of conductivity. Otherwise confusion results.

Now if we consider h with reference to any particular heat exchanger we have in mind, and know its value, then we revert back to the formula we used in the foregoing part of this article for calculating the area of the heat exchanger we were then discussing, or

$$A = \frac{Q}{h\,(t_2 - t_1)}$$

The foregoing expression considers the thermal conductivity of the metal and films of liquid or gases next to the metal surfaces. These films are of various thickness, depending mainly on the viscosity of the liquids and their velocity, and are far more resistant to heat flow than the metal itself. In fact the resistance of the metal may be disregarded in most instances. Thus heat in flowing from one liquid through a metal partition to another one, encounters three resistances, that of the metal wall and the two films. The total resistance becomes,

$$\frac{1}{h} = \frac{1}{h_1} + \frac{1}{h_2} + \frac{1}{h_3}$$

Where h is the overall coefficient of conductivity.
h_1 is the coefficient of conductivity of one liquid or gaseous film.

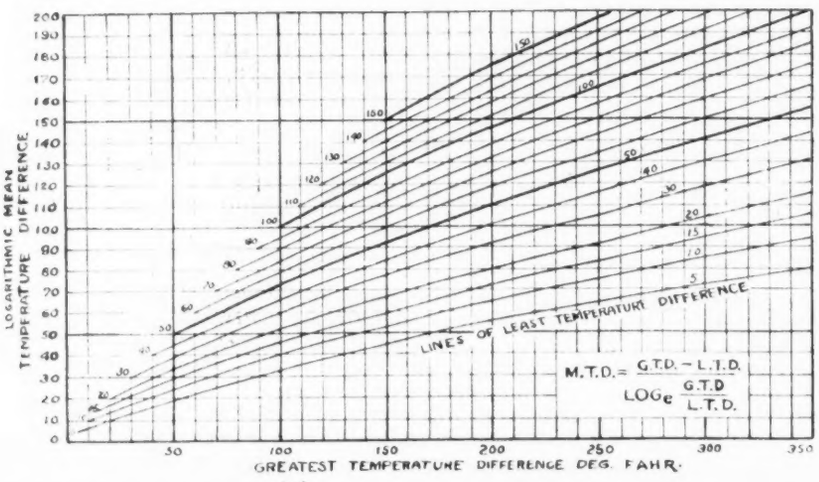
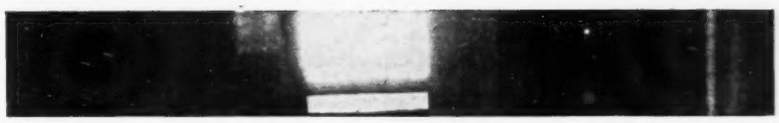

LOGARITHMIC MEAN TEMPERATURE DIFFERENCE
GREATEST TEMPERATURE DIFFERENCE DEG. FAHR.
LINES OF LEAST TEMPERATURE DIFFERENCE
M.T.D. = G.T.D. − L.T.D. / LOGe G.T.D / L.T.D.

Fig. 1—A handy chart for determining the logarithmic mean temperature difference in figuring heat transfer. Chart courtesy of Griscom-Russell Co.

Think ahead of your competitors—IT PAYS!



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Just to show you how definite this thing is—consider the record of Pennsylvania motor oils during the depression. They are quality oils and the public knows it. In 1929 they had about 15% of the U. S. motor oil business. By 1932 they had more than 31% of the total! *Sales increased 70% in three depression years!*

The Pennsylvania Grade Crude Oil Association is making it still easier for you to sell quality oils. It has set new standards for oils bearing its emblem—standards to meet the needs of modern motors. Its research laboratories constantly guard the quality which has won such big volume sales. It is advertising intensively—spreading the gospel that Pennsylvania oils are "better oils from the ground up". The advertising features the emblem, and the 4 safeguards the emblem gives the motorist.

Selling a Pennsylvania oil, under the emblem, is squarely in line with the times. It is a sure way to increase sales, speed turnover, and improve profits right *now*. It is a sound foundation for the quality business of the *future*.

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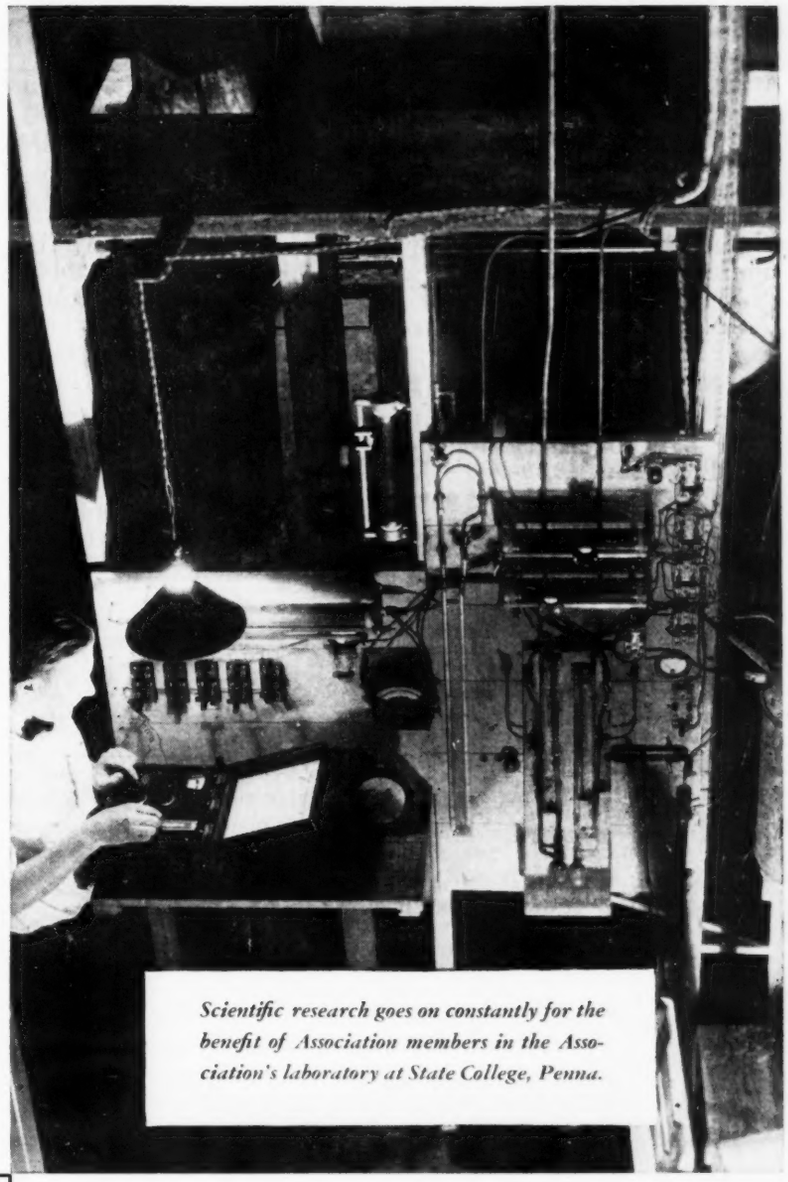
Oil City, Pennsylvania



Scientific research goes on constantly for the benefit of Association members in the Association's laboratory at State College, Penna.

The Emblem. *The privilege of displaying this emblem is one which your oils can enjoy. Motorists are being told exactly what it means—a 4-point program of quality protection. New regulations for using the emblem will be sent on request.*

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The Advertising. *The Saturday Evening Post, Country Gentleman and Time are carrying full page advertisements, doing a great selling job for you if you sell a Pennsylvania oil under the Association emblem. Show this advertising to your customers.*

BETTER OILS FROM THE GROUND UP!

h_2 is the coefficient of conductivity of the metal.
h_3 is the coefficient of conductivity of the other liquid or gaseous film.

Resistances are additive, when in series, and conductance is the reciprocal of resistance, just as in electrical flow.

As already stated, resistance of metals is negligible compared to that of the fluid films. The resistance of heat flow of the latter is illustrated by Badger[1]. The thermal conductivity of copper in B.t.u./cubic feet/degrees F. is 220 B.t.u. at 212° F. Hence a plate of copper 0.10 thick with a temperature drop of 1° F. between the two faces should transfer,

$$220\ \frac{12}{0.10} = 26{,}400 \text{ B.t.u. per hour}$$

But in practice, assuming steam on one side and boiling water on the other side, one will find about 300-500 B.t.u. passing through one square foot. If one side of the plate is in contact with a gas the heat transferred will be 1/100 of this value.

Heat transfer by conduction and convection for turbulent flow of liquids in clean pipes which attempts to encompass film resistances is given by the Nusselt type equation,

$$\frac{hD}{K} = \phi\ \frac{DV}{Z}\left(\frac{cz}{K}\right)^m$$

Where h = B.t.u./hour/sq. ft. of film area/°F. drop between pipe and fluid.
K = Thermal conductivity of stationary fluid, i.e., of the film, in B.t.u./hour/sq. ft./°F./ft. of thickness.
D = Inside diameter of pipe in inches.
Z = Viscosity (in centipoises) of fluid film relative to water at 60° F.
C = Specific heat.
V = Mass velocity in lbs./sec./sq. ft. of cross sectional area.
ϕ = A function to be determined.

This equation can be written,

$$\phi\ \frac{DV}{Z} = \frac{hD}{K} \Big/ \left(\frac{cz}{K}\right)^m$$

The evaluation of the exponent m has been attempted by different experimenters. Whitman and Morris determined a value of .37. At Figure 2 is plotted,

$$\frac{hD}{K} \Big/ \left(\frac{czm}{K}\right)$$

as ordinates against $\frac{DV}{Z}$ for their work[2].

[1]W. L. Badger. Heat Transfer and Evaporation. 1926, p. 36.

[2]Badger and McCabe. Principles of Chemical Engineering, 1931, p. 131.

We will assume, just as in the example first given, that fat oil of an oil absorption plant is to be heated from 80° to 248° F., and that the lean oil is to be cooled from 300° to 120° F. There are 180,000 gallons per 24 hours of lean oil and 200,000 gallons of fat oil (oil + gasoline). The exchanger is to be double walled, consisting of a 2″ pipe inside a 3″ pipe, and is to be divided into 6 sections , in parallel, each section handling 30,000 gallons per 24 hours through the 2″ pipe. The linear velocity of the oil is to be 120 feet per minute through each section.

External cross sectional area diameter of a 2″ pipe = 4.430 sq.in.
Internal cross sectional area diameter of a 3″ pipe = 7.393 sq.in.
Cross sectional area of annular space = 2.963 sq.in.

The viscosity of the oil = 40 secs. at 100° F., or 3.78 centipoises at 100° F., or 0.8 centipoises at 210°.

The oil has a gravity of 38° A.P.I.
38° A.P.I. oil at 60° F. = 6.951 lbs./gal.

$$\text{Mass velocity} = \frac{30{,}000 \times 6.95 \times 144}{1440 \times 60 \times 3.355} = 104 \text{ lbs./sec./sq. ft.}$$

Inside diameter of a 2″ pipe = 2.067″
Outside diameter of a 2″ pipe = 2.375″
Inside diameter of a 3″ pipe = 3.3″
Internal cross sectional area diameter of a 2″ pipe = 3.355 sq.in.

cross sectional area.
The mean liquid temperature = 210° F.

$$\frac{DV}{Z} = \frac{2.067 \times 104}{.80} = 268$$

$$\text{Then } \frac{hD}{K} \Big/ \left(\frac{CZ}{K}\right)^{.37} = 1850$$

$$h = \frac{K\ 1850 \left(\frac{CZ}{K}\right)^{.37}}{D}$$

From an expression developed by Weber[3],

$$K = 0.868CS \sqrt[3]{\frac{S}{M}}$$

Where C is the sp.ht.
S is the sp.gr.
M is mol.wt.

$$\text{Then } K = 0.868 \times .54 \times .766 \sqrt[3]{\frac{.766}{180}} = .058$$

$$h = 0.058 \times 1850 \frac{\left(\frac{.54 \times .80}{0.058}\right)^{.37}}{2.067} = 110$$

The viscosity (and consequent thickness) of the fluid film differs appreciably from

[3]See Heat Transfer and Evaporation, W. L. Badger, 1926, p. 11.

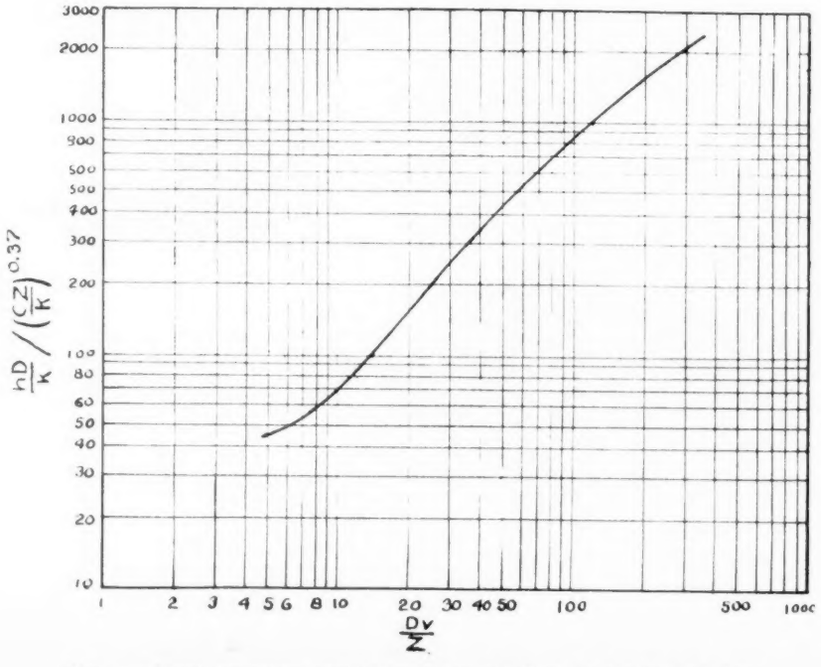

Fig. 2—Heat transfer coefficients for oil film in turbulent flow

mean viscosity of the liquid. This is due to the fact that the mean temperature of the film must be intermediate between temperature of the separating metal and the temperature of the body of the liquid. Thus for liquids being cooled, the film temperature will be lower than the body of the liquid; and the viscosity will be greater. The film thickness and consequent resistance to heat transfer will be greater than that indicated by the above equation. The viscosity is taken as the mean viscosity of the liquid.

Since the determination of the true mean film viscosity is in most cases difficult, if not impossible, an imperical relation between the conductivity of the film of a liquid being cooled over that being heated is used. Morris and Whitman state that, in order to coincide with their experimental work, the coefficient as above determined must be reduced by 25 per cent if the liquid is being cooled. Therefore .75 x 110=83.

On the cold side of the pipe wall, the flow is greater on account of the gasoline contained in the oil; 10 per cent more.

$$\frac{33{,}300 \times 6.67 \times 144}{1440 \times 60 \times 2.963} = 125 \text{ lbs./sec./sq. ft.} = \text{mass velocity.}$$

The mean liquid temperature is 164° F.

Badger[4] substitutes for the diameter, four times the shape factor of the annular space, as follows:

$$D = \frac{4 \times \text{cross sectional area}}{\text{perimeter of heating surface.}}$$

$$D = \frac{4 \times 2.963}{2.375 \times 3.1416} = 1.59 \text{ inches}$$

$$\frac{DV}{Z} = \frac{1.59 \times 125}{1.0} = 199$$

The viscosity of the cold oil, with its gasoline content, has been estimated from the viscosity of the absorption oil and the viscosity of gasoline.

$$\text{Then } 1600 = \frac{hD}{K} \Big/ \left(\frac{CZ}{i}\right)^{.37}$$

$$h = \frac{K\,1600 \left(\frac{CZ}{K}\right)^{.37}}{D}$$

$$h = \frac{0.058 \times 1600 \left(\frac{.54 \times 1.00}{.058}\right)^{.37}}{1.59} = 134$$

[4]W. L. Badger. Heat Transfer and Evaporation, page 60.

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The overall coefficient is

$$\frac{1}{h} = \frac{1}{h_1} + \frac{1}{h_2} \text{ or}$$

$$\frac{1}{h} = \frac{1}{83} + \frac{1}{134}$$

h = 51 B.t.u./sq.ft./hour/°F.

The resistance of the metal wall has been neglected as being a minor factor in the heat transfer. This calculated coefficient is somewhere in the neighborhood of the true coefficient for clean tubes. But its usefulness is diminished because the cleanliness of the heating surface has a surprising effect on the coefficient. Only a slight increase in roughness increases the film thickness and decreases the coefficient to a great degree. Furthermore, the result has value mainly in the case of double pipe exchangers. In some multi-pass types of today, velocities cannot be calculated with precision.

A formula sometimes used in practical work for double pipe oil to oil heat exchangers, follows:

$$h = \frac{1.88}{D^{0.2}}\left(\frac{V_m}{Z}\right)^{.8}$$

It will be applied to the solution of the foregoing problem. For the inside pipe,

D = 2.067 in.
V_m = 104 lbs./sq. ft./sec.
Z = 0.8

$$h = \frac{1.88}{2.067^{0.2}}\left(\frac{104}{.8}\right)^{.8}$$

= 79, for the inside pipe.

$$h = \frac{1.88}{1.59^{0.2}}\left(\frac{125}{1.0}\right)^{.8} = 82 \text{ for the annular space.}$$

$$\frac{1}{h} = \frac{1}{h_1} + \frac{1}{h_2}$$

$$= \frac{1}{79} + \frac{1}{82}$$

h = 40 B.t.u/ft.²/°F./hour.

The foregoing data only deals with the liquid to liquid heat exchangers. There remains the important question of film coefficients for condensing steam and condensing petroleum fractions. Published data on this subject is meagre. Velocities have not been determined, air in the steam makes a tremendous difference, and in condensing petroleum fractions the uncondensed gas has an important effect. McAdams[5] in correlating the work of different investigators, proposes the Nusselt formula,

$$h = 0.725\left(\frac{K^3 p^2 gr}{DU(\triangle t)}\right)^{\frac{1}{4}}$$

Where

- h = The average coefficient of heat transfer for the entire wall, in B.t.u./hour/sq. ft./°F./ft.
- K = Thermal conductivity of the condensate, B.t.u./hour/sq. ft./°F./ft.
- P = Density of the condensate, lb / cu. ft.
- g = Gravitational constant, ft. hour² = 4.18×10^8.
- r = Latent heat of condensation, B.t.u./lb.
- D = Outside diameter, ft.
- u = Viscosity, lbs./ft./hour = 2.42 times the viscosity in centipoises.
- $\triangle t$ = Temperature difference between vapor and wall, °F.

[5]Wm. H. McAdams. Heat Transfer, 1930, p. 259.

This formula is for pure substances.

Film coefficients, as listed by McAdams[6], for heat transfer to boiling water for temperature differences of 1.5 to 15° vary from 450 to 1025 B.t.u./hour/sq. ft./°F., from a vertical iron plate, depending upon whether the water is stirred or not, but at 10° difference for stirred water it is 1400 B.t.u., for unstirred water, 900 B.t.u., and 120 to 1050 B.t.u.'s from a single horizontal pipe to boiling gasoline, for temperature differences of 8 to 20° F.

Comparison of Commercial Exchangers

The authors show at Table 1 a comparison of commercial multi-pass, shell and tube heat exchangers of today. Assuming that they are of equally sound construction, the last column, the heat transferred per hour per dollar, is the real criterion of an exchanger's value, not the price per square foot, a value upon which some refinery executives place the most reliance.

Expense of Operating a Heat Exchanger

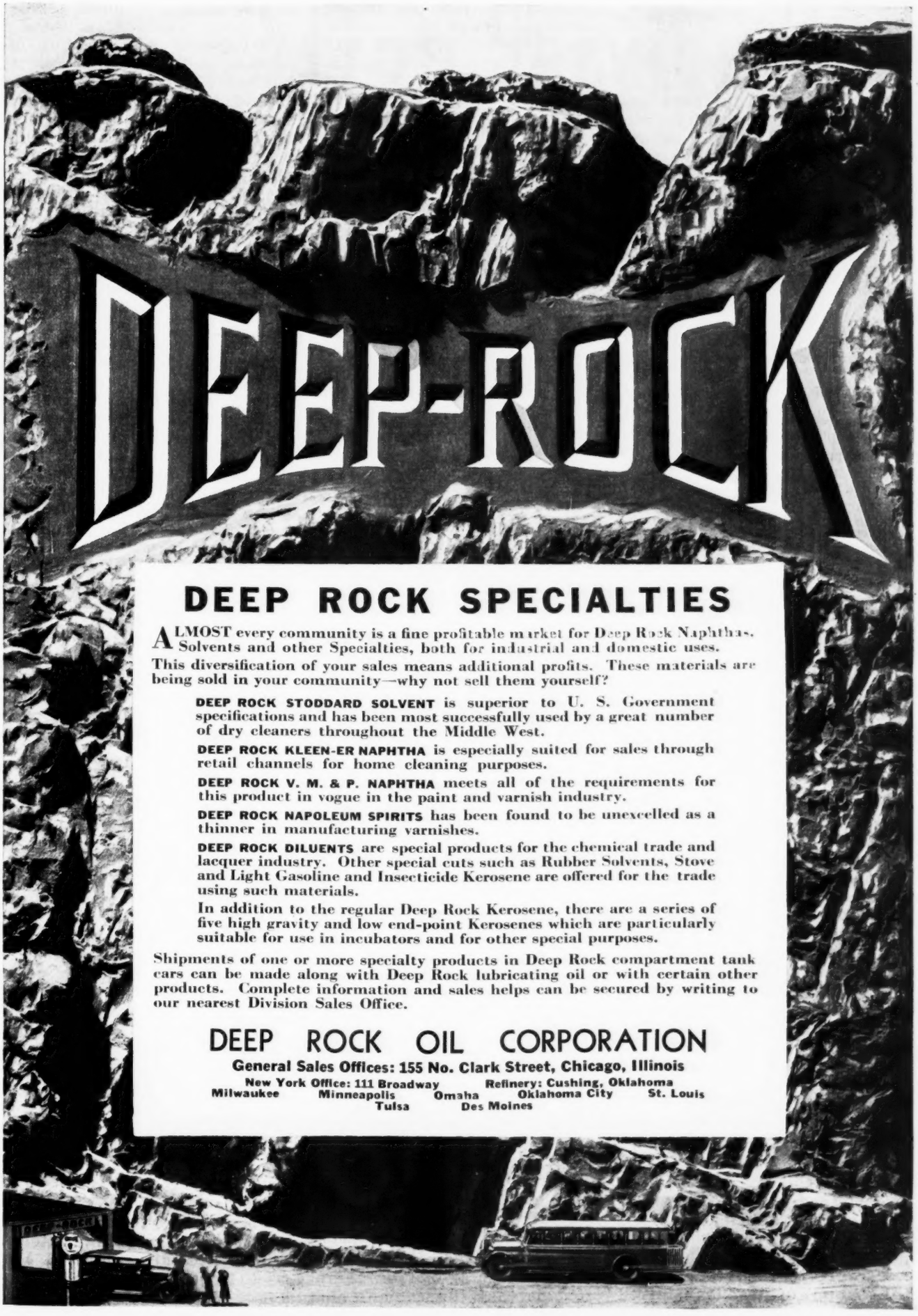
The expense of operating a heat exchanger must be kept in mind; not only its liability to corrode, or the ease or difficulty of cleaning it, but also the pressure required to force oil through it. One can speed up the velocity of the oil so as to increase the overall heat transfer coefficient and consequently reduce the size of the equipment

[6]Wm. H. McAdams. Heat Transfer, 1930, p. 289 and 292.

Table 1

Comparison of Commercial Heat Exchangers

Type	Fluids	Name of Manufacturer	B.T.U's. Transferred Per Hour	M.T.D. F.	Transfer Rate (h)	Surface Sq. Ft.	Price Per Sq. Ft.	B.T.U's. Transferred Per Hour Per Dollar
Reflex Condenser	Water to gasoline vapor and liquid gasoline, and fixed gas	A	1,175,000	25.5	100	461	$1.83	1,399
,,	,,	B	1,175,000	25.5	102	453	1.50	1,730
,,	,,	A	1,764,000	25.5	105	660	1.62	1,660
,,	,,	B	1,764,000	25.5	90	775	1.26	1,805
P. D. Exchanger	Gasoline to liquid gasoline, and gasoline vapor and gas	A	1,760,000	53.5	82	404	2.23	1,958
,,	,,	B	1,760,000	53.5	56	590	1.96	1,525
,,	,,	C	1,760,000	53.5	132	402	3.94	1,798
,,	,,	D	1,760,000	53.5	80	660	1.94	2,230
P. D. Cooler	Water to Gasoline	A	270,000	19.8	67.5	202	2.22	600
,,	,,	B	270,000	19.8	45.8	298	1.94	467
,,	,,	A	425,000	19.8	93.0	231	2.60	707
,,	,,	B	425,000	19.8	65.0	330	2.31	557
Base Heater	Oil to Gasoline	A	3,040,000	95	65	490	2.27	2,740
,,	,,	B	3,040,000	95	59	540	1.81	3,120
Base Heat	Steam to Boiling Gasoline	A	271,000	45	94	64	6.60	642



DEEP ROCK SPECIALTIES

ALMOST every community is a fine profitable market for Deep Rock Naphthas, Solvents and other Specialties, both for industrial and domestic uses. This diversification of your sales means additional profits. These materials are being sold in your community—why not sell them yourself?

DEEP ROCK STODDARD SOLVENT is superior to U. S. Government specifications and has been most successfully used by a great number of dry cleaners throughout the Middle West.

DEEP ROCK KLEEN-ER NAPHTHA is especially suited for sales through retail channels for home cleaning purposes.

DEEP ROCK V. M. & P. NAPHTHA meets all of the requirements for this product in vogue in the paint and varnish industry.

DEEP ROCK NAPOLEUM SPIRITS has been found to be unexcelled as a thinner in manufacturing varnishes.

DEEP ROCK DILUENTS are special products for the chemical trade and lacquer industry. Other special cuts such as Rubber Solvents, Stove and Light Gasoline and Insecticide Kerosene are offered for the trade using such materials.

In addition to the regular Deep Rock Kerosene, there are a series of five high gravity and low end-point Kerosenes which are particularly suitable for use in incubators and for other special purposes.

Shipments of one or more specialty products in Deep Rock compartment tank cars can be made along with Deep Rock lubricating oil or with certain other products. Complete information and sales helps can be secured by writing to our nearest Division Sales Office.

DEEP ROCK OIL CORPORATION

General Sales Offices: 155 No. Clark Street, Chicago, Illinois

New York Office: 111 Broadway **Refinery: Cushing, Oklahoma**

Milwaukee **Minneapolis** **Omaha** **Oklahoma City** **St. Louis**
Tulsa **Des Moines**

and its initial cost, but the cost of steam for pumping the oil rises.

One can assume that 7500 gallons of oil per hour are being pumped through a heat exchanger in one case with a pressure drop of 60 lbs. per square inch, and in another case with a drop of 10 lbs. per square inch. The difference is 50 lbs. The horsepower saving in case of the lower pressure is,

$$\frac{7{,}500 \times \left(\frac{50}{100}\right) \times .255}{7.5 \times \times .65}$$

= 195 lbs. of steam required to pump 7,500 gallons per hour.

7.5 = cubic feet per gallon.

$\frac{50}{100}$ = ratio of pressure drop to steam pressure, assuming steam at 100 lbs. pressure

.65 = pump efficiency.

.255 = lbs. of steam per cubic foot at 100 lbs. pressure.

195 lbs. of steam = 5.75 Boiler H.P.

$\frac{195 \times 1190}{.70 \times 1000}$ = 332 cubic feet natural gas per hour.

195 = lbs. of steam.

1190 = B.t.u. per lb. of steam.

70% = boiler efficiency.

1000 = B.t.u. per cubic foot of gas.

332 × 24 = 7.950 cubic feet per 24 hours, or $580.00 per year, with gas at 20 cents per M.C.F.

Conduction, Convection and Radiation

Heat is transferred in three principal ways; by conduction, convection and radiation. It passes by conduction from one part of a body to another part, or from one body to another body which are in physical contact with each other. It passes by convection from one place to another in a fluid by a movement of the fluid itself. It passes from one body to another by radiation in the form of radiant energy. The radiant energy that is absorbed by the second body is transformed into heat. Radiant energy is analogous to light except that longer wave lengths are utilized.

The mechanism of the first two methods of heat transference is fairly obvious but the third one, by radiant energy, is not always clearly understood. According to the Stephan law the amount of heat transferred by radiation from one body to another depends on the difference of the fourth power of the absolute temperatures of the bodies.

$$Q = a(T_1^4 - T_2^4)$$

Where Q = the quantity of heat.

T = the absolute temperature of the bodies.

a = a coefficient depending upon the nature of the body, expressed in B.t.u./sq.ft./hour/°F.

The coefficient for unglazed ceramic grids, like that in a Reznor Radiantfire room stove, is 1.34 x 10^{-9}, or .00000000134 B.t.u./sq. ft./hour/° F.

Assume that the ceramic grids are heated by the hot stove gases to 2500° F., and that a body nearby is heated by radiation from the ceramic grids to a temperature of 80° F.

Then Q = .00000000134 (2960^4 − 540^4)
= 102396 B.t.u./sq. ft./hour/°F.

It is impossible to make a mathematical comparison of the surface needed for radiant heat in a Radiantfire stove, with that required if only, or mainly, convection and conduction heat were employed. One could imagine that the radiant stove were enclosed to reduce radiation to the room to a minimum and that the gases had a maximum temperature of 2500° F. inside the stove. Some heat would be radiated to the inner walls of the stove and some transferred thereto by conduction and convection. Heat would travel through the walls of the stove by conduction, and thence to an object in a room by conduction and convection.

There would also be some radiant heat from the outside walls of the stove, depending upon their temperature, but if they were kept below a red heat the radiation would be relatively small. For all these transfers the coefficients of heat transfer are unknown, or known very hazily. But in any event one can say that the transference of heat by radiation does not require less surface than that transferred by conduction and convection, for the grids in a radiant stove have to be first heated by convection and conduction and they can transmit no more heat than they receive.

One advantage of a radiant stove is that the radiant heat is projected horizontally from the stove, whereas in a stove that depends mainly upon conduction and convection for its heating effect the heat mainly ascends to a strata near the ceiling where it is relatively ineffective. Radiant heat does not heat the air between the source of the heat and the object the radiation falls upon. Another advantage of a radiant stove is that the hot grids produce a pleasing effect upon the eye.

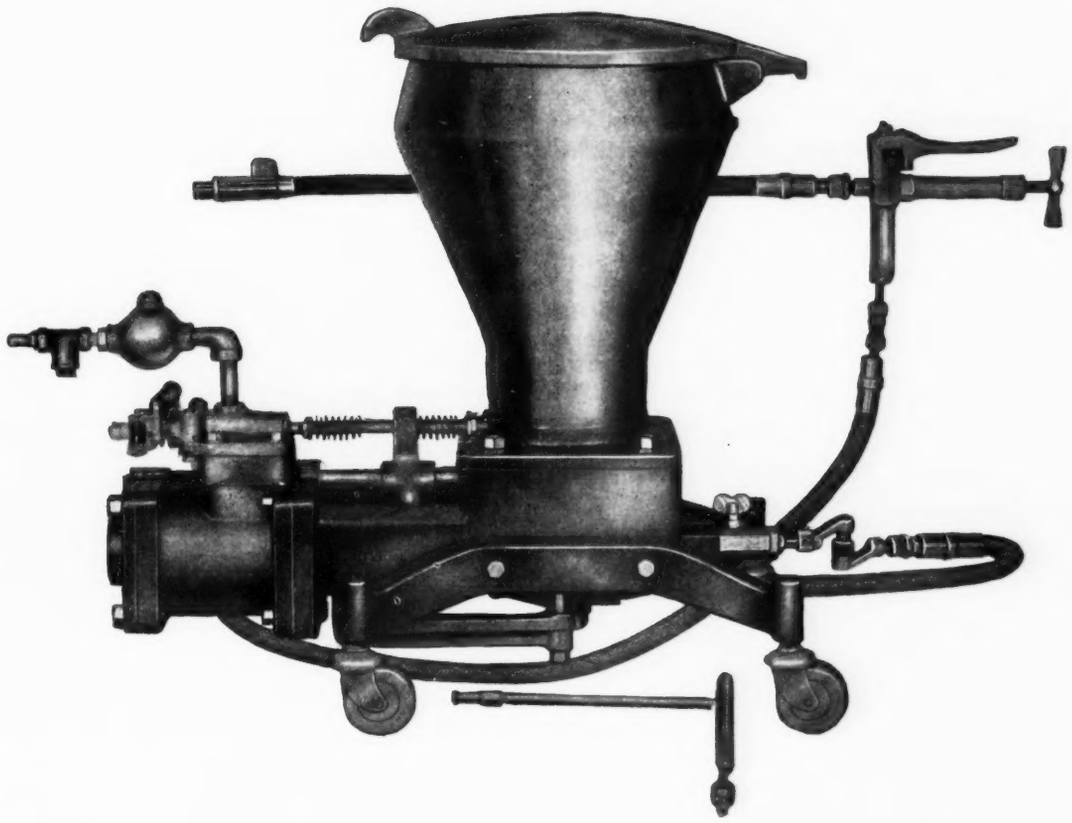
Radiant brick sections are placed in oil heating furnaces, or rather taken better advantage of than formerly, not because heat transference is more efficient therefrom, but because they provide a highly heated surface upon which the furnace gases can strike without checking the combustion of these gases. The heat derived from the flame by the checker-work is in turn transmitted to the pipe coils by radiation. By this indirect means heat can be withdrawn from the flame during the process of the combustion without retarding the combustion. On the other hand, if gases in the process of combustion strike the relatively cold pipe coils of a furnace, the combustion is retarded with a consequent loss of thermal efficiency and deposition of soot upon the coils. The gases leaving the radiant checkerwork are hot, of course, and this heat is extracted by so-called convection sections of pipe coil which follow the radiant area. Since a portion of the heat has been removed in the radiant section, which also acts as a combustion space, the size of the convection bank need not be so large as would be required if it were necessary to remove all the heat in this section. Thus by using a combination of radiation, and conduction, and convection sections, it is possible to reduce the overall size of the furnace.

(To be Continued)

Sues Anderson-Prichard

NEW YORK, June 12.—The Texas Co. has filed suit against Anderson-Prichard Refining Corp. alleging infringement of its Behimer cracking patents. Suit was filed in the U. S. District Court in the western Oklahoma district.

Lubrication Service Men *call it* "THE ROCK CRUSHER"



And it is well named at that. This Alemite Heavy Duty Compressor (Model 5370) pumps extremely heavy and fibrous lubricants as nothing else has ever done it. Its construction is simple and rugged. A double-acting air motor reciprocates a plunger, pumping lubricant at a pressure 32 *times the air pressure used!* Is particularly well adapted for lubrication of busses and trucks where heavy service with the toughest of lubricants is the order of the day.

Send for the whole story on this valuable and remarkable piece of equipment.

ALEMITE CORPORATION (Division of Stewart-Warner), 1856 Diversey Parkway, Chicago, Illinois 729
Please send complete information on your Model 5370—"The Rock Crusher."

Name..... Company.....

Address..... City..... State.....

PIONEERS IN SPECIALIZED LUBRICATION FOR THE AUTOMOTIVE INDUSTRY

Premium Gasoline Sales Drop 50% in Middle West

SALES of premium grades of gasoline in the Middle West dropped approximately 50 per cent in the past winter, as compared with the winter of 1931-32 according to a survey conducted by this publication. The survey is based on gallonage reports of seven important Mid-Continent integrated companies doing business largely in Standard of Indiana territory.

In the six months ended March 31 these seven companies sold 28,119,543 gallons of premium gasoline through their owned and controlled stations. In the same period the previous year these companies sold 62,146,862 gallons of premium gasoline. The loss in premium gasoline gallonage thus was 34,027,319 gallons.

No such loss in gallonage of regular grades is shown by the compiled reports. In the six months ended March 31, 1933, the seven companies sold 204,158,497 gallons of regular. This compares with total sales of 215,255,142 gallons of regular gasoline in the six months ended March 31, 1932. The loss in regular gallonage thus was only 11,096,645 gallons, or 5.2 per cent.

Third grade gasoline sales showed a remarkable upward trend during the period under review. In the six months ended March 31 last, the seven companies sold 67,144,625 gallons of third grade gasoline through owned and controlled stations, as compared with 21,312,184 gallons in the corresponding period a year before. The gain in third grade sales was 45,832,441 gallons, equalling the loss in both premium and regular grades.

Middle western companies began selling a third grade gasoline in April 1931, following the lead of the Standard Oil Co. of Indiana. In that year sales of this competitive grade by the seven companies rose to a peak of 13.6 per cent of total sales in August and dropped back to 5.8 per cent in December.

Last year third grade again reached its peak of sales in August but the peak represented 27.8 per cent of all gasoline sales in that month. Subsequently it dropped to 19.4 per cent in December. December 1932 sales were more than three times as large as in December, 1931.

In the last quarter of 1931 premium gasoline constituted 24.1 per cent of total sales. In the first quarter of 1932 premium sales had dropped to 16.8 per cent and in the last quarter to 10.7 per cent of total gasoline sales. The downward trend continued through the first quarter of this year, reaching 7.9 per cent of total sales.

No significant trend in regular gasoline sales can be observed in the analysis except immediately after third grade was introduced when there was a sharp drop. Recently the range has been from about 64 to 71 per cent of total sales, the low in August and the high in winter.

An accompanying chart shows the breakdown of gasoline sales through owned and controlled stations of the seven companies from March 31, 1930, to March 31, 1933.

Following are the percentages for each grade for the past six months of the seven companies:

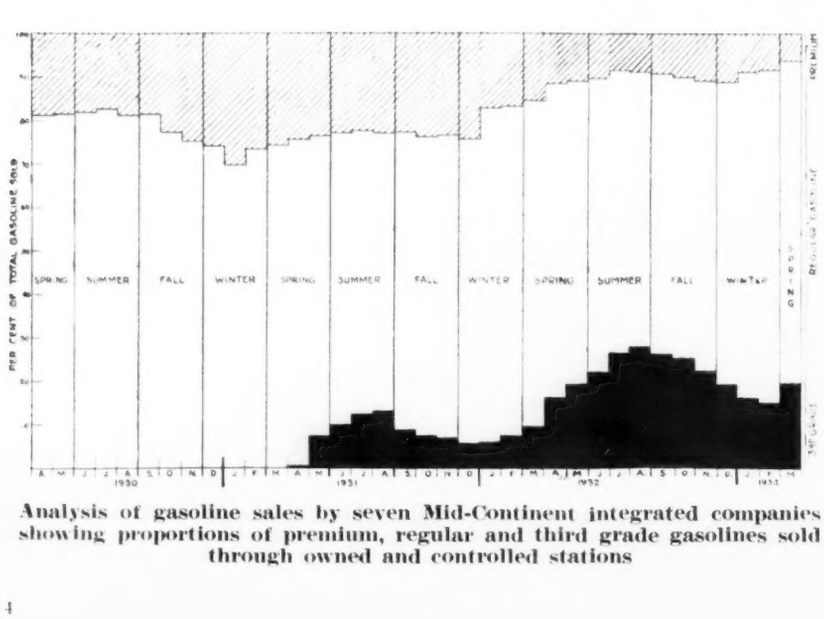
Per Cent of Total

Month	Premium	Regular	Third
Oct. 1932	10.2	64.4	25.4
Nov.	10.9	66.7	22.4
Dec.	11.2	69.4	19.4
Jan. 1933	8.8	69.8	21.4
Feb.	8.4	71.2	20.1
Mar.	6.4	68.9	24.7

For comparative purposes the same figures are given for the corresponding months a year previous:

Per Cent of Total

	Premium	Regular	Third
Oct. 1931	23.8	68.8	7.4
Nov.	23.4	69.7	6.9
Dec.	24.4	69.8	5.8
Jan. 1932	17.4	76.0	6.6
Feb.	16.7	75.7	7.6
Mar.	15.5	74.6	9.9



Analysis of gasoline sales by seven Mid-Continent integrated companies showing proportions of premium, regular and third grade gasolines sold through owned and controlled stations

To Build New Gasoline Plant

LOS ANGELES, June 9.—Plans were announced the past week by Standard Gasoline Co.—subsidiary of Standard Oil Co. of California—to erect a natural gasoline absorption plant in the Mountain View (Weed Patch) field to handle gas production from Dana Hogan's Wharton No. 1, completed as a semi-wildcat several weeks ago.

The plant with a capacity of 1,500,000 cubic feet will cost $30,000. Gas from the well is unusually wet, containing about two gallons of gasoline per 1000 cubic feet of gas. Standard Oil Co. is not actively drilling in the new field.

ADVERTISING PAGES REMOVED

With the Independent Marketers

By E. L. Barringer, N.P.N Staff Writer

SEVERAL fine old gasoline trade names prominent years ago in the ranks of the independent marketers went by the board recently when Socony-Vacuum Corp. changes its subsidiary company outlets to "Mobilgas". These are Wadham's in Wisconsin, and White Star's through Indiana, Michigan and into Canada. Incidentally, "Silver Flash"—the trade name of the former Western Oil & Refining Co., Indianapolis and the Columbus Oil Co., Columbus, Ohio, (The Trimble companies) is back as the private brand name of Shell Petroleum Corp. jobbers.

* * *

INDEPENDENT marketers are continuing to develop their principal service stations as "onestop" outlets, although the glamour and publicity in connection with major company moves in this direction in recent years have largely passed away.

A tendency is noticeable in the direction of merchandise for the personal use of the motorist, as many independent marketers for years have sold tires and accessories for the automobile.

One marketer has an elaborate dining room, back of a main station, that is one of the best eating places in his town. Excellent meals are served, and in the evenings a small orchestra provides music for dancing.

The restaurant is a source of profit in its own right, and it also makes gasoline and oil sales. Many more companies now call on this marketer for business, such as provision and meat packing houses, restaurant equipment salesmen, and so on. Well, the more contacts and the larger the purchasing list the more gasoline and oil prospects there are for this marketer to solicit.

Another source of additional station profits is the ice house. In some cities the ice companies distribute mainly through small ice houses scattered in the residential districts, and many of them border on service station drives.

Station salesmen handle the ice sales, thus reducing the cost of ice distribution. Also, the ice house at the station is open as long as the station is, so customers have service on Sundays, holidays, and late at night that would not be available otherwise.

The sale of ice at stations also has the possibilities of branching into allied lines. With the refrigeration available why not handle meats, dairy products and limited grocery and meat store items during the hours that the regular stores are closed?

In order not to add more competition the marketer could arrange with his local meat and grocery dealer to handle such merchandise on a commission basis. At the close of business Saturday night the meats, the necessary supplies could be taken from the store to the service station ice house.

Over the week end customers needing additional food on account of unexpected company or hurriedly planned picnics, could buy at the station. Monday morning the unsold goods would be returned.

At first glance there does not seem to be much connection between steaks and gasoline, but some marketers have been walking around their station ice houses wondering if the little wooden structure does not have more possibilities than the sale of frozen water. The service station has wandered a long ways from its original purpose and an emergency food store may be another step in "one-stop service."

IMPERIAL OIL CORP. has three trailer units hauling gasoline from its refinery source to its marketing territory around Bay City, Mich. On the back of each is a sign indicating the amount of tax paid by the unit, around $2000 a year, for using the highways. Railroad propaganda has made much of the point that trucks are using a roadbed built from public funds. This plan of placing the amount of taxes paid on trucks, for oil companies and for all trucking companies, seems excellent to correct this impression, and to present the true facts to the motoring public.

* * *

THE idea of having the farmer come to town, buy all his petroleum products at the bulk plant, and do his own hauling home, instead of having oil company trucks wandering all over the countryside making deliveries is spreading into the eastern end of the Indiana Standard territory.

Farther west the idea is not new. In fact, in Montana it is a time honored custom for the farmer to come to the bulk plant. The merchandise is all neatly arranged, the farmer purchases any and all petroleum products at the bulk plant, and the plant manager is a salesman instead of a truck driver. One major company thought it would introduce "modern" sales methods in Montana, and began to truck into the country, only to find that the customer really preferred to drive to town to buy.

Many independent marketers have questioned the practice of hauling into the country, selling at a price lower than in the service station, and then carrying the account. They contend that the farmer comes to town anyhow and that he frequently

stops at the service station to buy a couple of gallons of gasoline for his car before returning home, yet has the oil company truck his other petroleum purchases miles into the country.

Present low tank wagon prices have forced the issue in some cases. One marketer, for example, established a dock price on third grade gasoline after the recent reduction and lets the farmer do his own hauling. The farmer pays cash, but saves 2½ cents over having it delivered to his farm.

Many marketers are watching the idea closely, and believe that some day the farmer will come to town for all his needs, and that a dock price will be established, in place of the present country tank wagon price structure. Also, when such a change is made, sales may be placed on a cash basis.

* * *

LEO SCHEIDERER, manager of the Penn Oil Co., can look up from the desk in his office in Marysville, Ohio, and tell at a glance the rate of gasoline movement out of his bulk plant and compare it with sales by weeks over the past four years.

The sales chart is divided into weeks along the base. Sales volume is marked off on the vertical scale. A distinguishing color indicates sales for each year. Every week the chart is extended.

As the company markets in a farming community the chart shows one peak of consumption in the early spring, with another a few months farther on, then another rise in the fall after the summer slump.

The chart also reveals something beyond the company's operations, and that is the excellent position of this local marketing company in spite of general business conditions.

* * *

WHILE major companies are in the mood to clean up their unprofitable marketing practices, many independent marketers wonder what will be done about the retail price cutting, at some tire company stations fostered by long margins.

In several mid-western cities marketing conditions are clean excepting for tire stations using gasoline as a trade puller. Long margins on these national accounts permit shaving the retail price.

There is a peculiar angle to conditions in one city. The tire station handles gasoline from two refiners, openly offers a 2-cent discount, and continues in this policy today in spite of the problem having been taken to high authorities several times in recent years. Now both these refiners have distributors operating in this city, and the long term contracts have exceptionally wide margins. At today's retail price a magician would be hard pressed to pull a profit for the refiners out of these contracts, yet their own gasoline is causing much of the trouble.

* * *

ANY marketer driving into lower Michigan this summer to enjoy fishing could profitably spend a few hours looking at some modern service stations.

We recommend a stop at Ann Arbor to see the new Staebler Oil Co. station (pictures on page 34 of the May 31 issue) opposite the University of Michigan campus. Special points are the exterior walls of enameled plates, the layout that permits future expansion at the rear without changes in the front, the display windows, the pump island house, and especially the ladies rest room with its imported washable wall paper ($12 a roll and worth it), and the layout of the room.

Up in Lansing is a new station, about a mile east on Washington street, built by C. M. Doyle, distributor for Phillips products. Note the rock garden in front of the pump island, and maybe the garden at the rear of the lot will be completed. A telephone also is on the pump island so husbands can explain why they will be late for dinner. Then there is the mosaic exterior walls, the large plate glass windows, and the station building roof that holds water to keep the service departments cool.

A FEW years ago, when major oil companies were expanding through buying local oil companies, a clause usually was included in the contract preventing the marketer from re-entering the oil business for a period of three to five years.

Many of these clauses are expiring now and these former marketers are getting back in the oil business. With the present over-development of marketing outlets another venture would seem hazardous, but these old timers have many points in their favor.

They are starting now from scratch. They have no expensive leases, no bad accounts, and are really starting to lead their business lives over again but with the experience of previous years. Some of these old timers stayed on with major companies as managers, at least for awhile, others traveled and noticed what marketers in other parts of the country were doing, so they have not been so far from oil marketing after all.

A trip in Michigan last week yielded four names, re-entering the marketing business, that will be remembered by many of the older marketers.

Grimes & Madigan was a big name in oil marketing at Grand Rapids, Mich., some years back. Well, Frank Madigan is back with the F. A. Madigan Oil Co. Fred S. Grimes stayed on as local manager of the company that bought Grimes & Madigan. Now Mr. Grimes is back in the independent ranks with his own company.

Over at Pontiac the L. H. Cole Oil & Gas Co. was a prominent marketer some years back. When the business was sold Mr. Cole took on the job of watching his personal fortune, and that of his father's. Now he is back in the oil marketing business.

The fourth marketer still has some weeks to go under his contract, but his name will be added to the list shortly.

The question naturally comes to mind, as to whether the major companies in the long run will really profit by such purchases as against having let the local oil marketer be their distributor.

ADVERTISING PAGES REMOVED

Individual Service Station Design

While More Costly Than Building to a Standard Design, Proved a Paying Policy in Building Gallonage

By Stanley T. Moore*

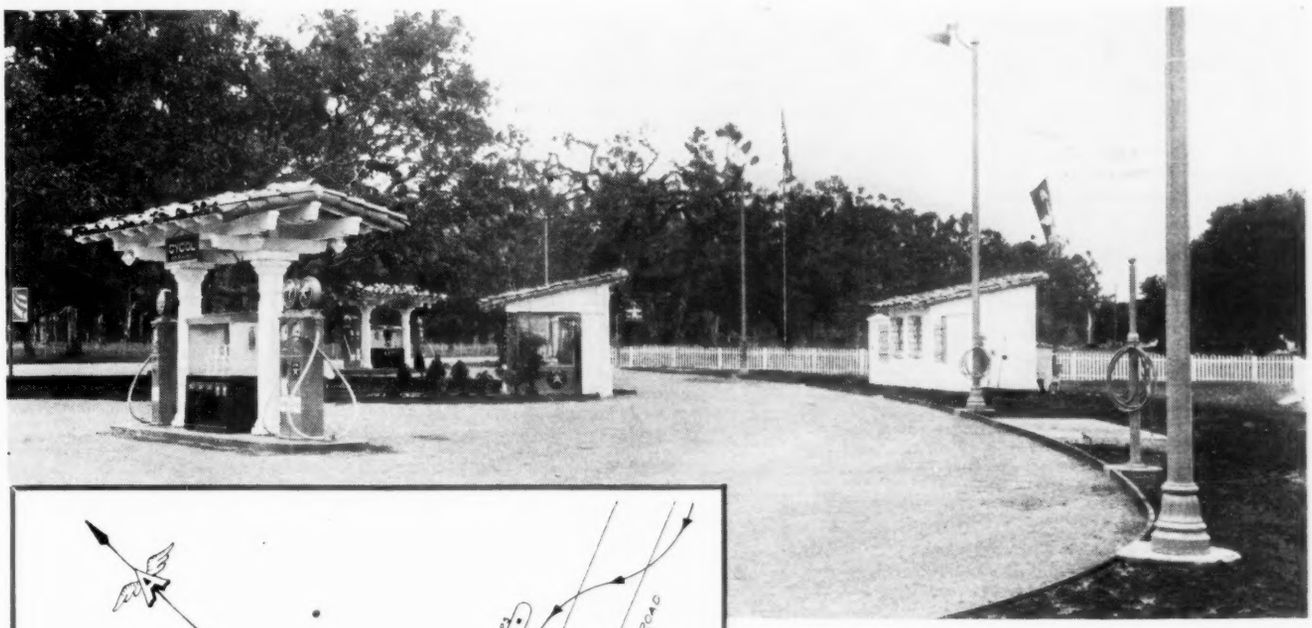
NO LONGER is the service station merely a gasoline and oil depot. The modern service station today provides, in addition to gasoline, oil, air and water, complete lubrication service, tire and battery service, and features a complete line of household specialty products.

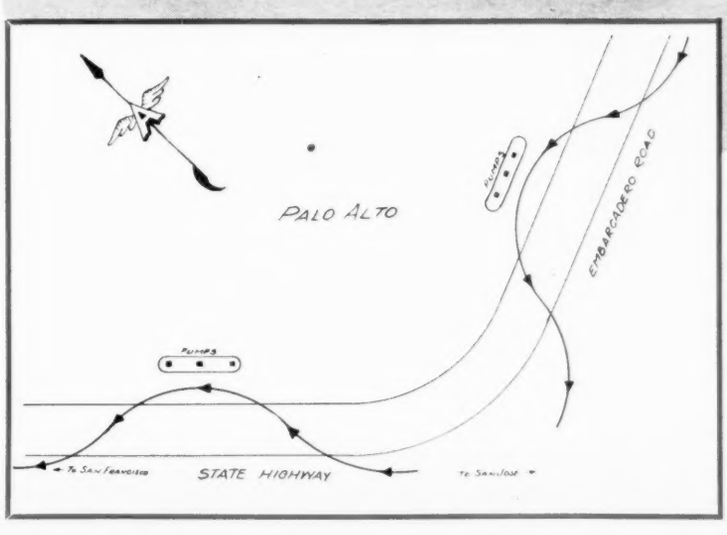
With this vast elaboration of the old service station's functions has come a new technique in service station planning, with a vital effect on business volume. The modern successful station must be planned to house all of the new paraphernalia, but most important, it must reflect careful architectural design and utmost care of arrangement, according to B. I. Graves, general sales manager, Associated Oil Co.

Careful preliminary planning is the keynote of successful service station business, many a service station builder has found after expending a substantial sum in poorly planned construction. This truth holds good no matter how favorable the location.

In its present service station

*Associated Oil Co., San Francisco.





A departure from conventional design is this new Associated station in Palo Alto, Cal., opposite Stanford University stadium. Early Californian architecture was chosen to blend with the surroundings, and a large and historic oak tree was left undisturbed in the center. Because the natural traffic flow from the main highway, on one side of the lot, and the city street on the other, did not touch a common spot where a single service station building could be placed, two separate pump islands were built, each handling the traffic from one of the arterials. The service station is detached from both islands, and at the rear of the lot comfort stations and grease rack

construction program in the San Francisco bay region, Associated Oil Co., through B. G. Brown, division engineer, has evolved a technique which, in its application to a wide diversity of locations, has proven outstandingly successful as indicated in gallonage figures.

Location, from a potential gallonage point of view, is of course paramount, and always will be. Second only in importance, however, are the twin factors of arrangement and architecture.

No longer will the motorist—particularly the woman driver—be inconvenienced by maneuvering into a station where entrance and exit are difficult because of poor driveway, pump island or building placement. Traffic must flow smoothly and easily from the highway or street, alongside the pump island, and back out again. Where the service station is located on a corner, the station arrangement must be such that ease of entrance and exit from either street is provided.

Of almost equal importance, measured in sales results, is the factor of architecture. The average motorists will subconsciously choose the neater and more impressive of two competing stations. Architectural trimness connotes fair dealing and quality. Hence the now rapidly developing technique of service station design comes into being as an important branch of the field of architecture.

First, the design must be attractive. Second, it must be suited to the previously mentioned factor of layout for maximum driver convenience. Third, the structure should harmonize with the general architectural trend in the immediate community. Finally, the design should take into consideration the most modern facilities in station equipment.

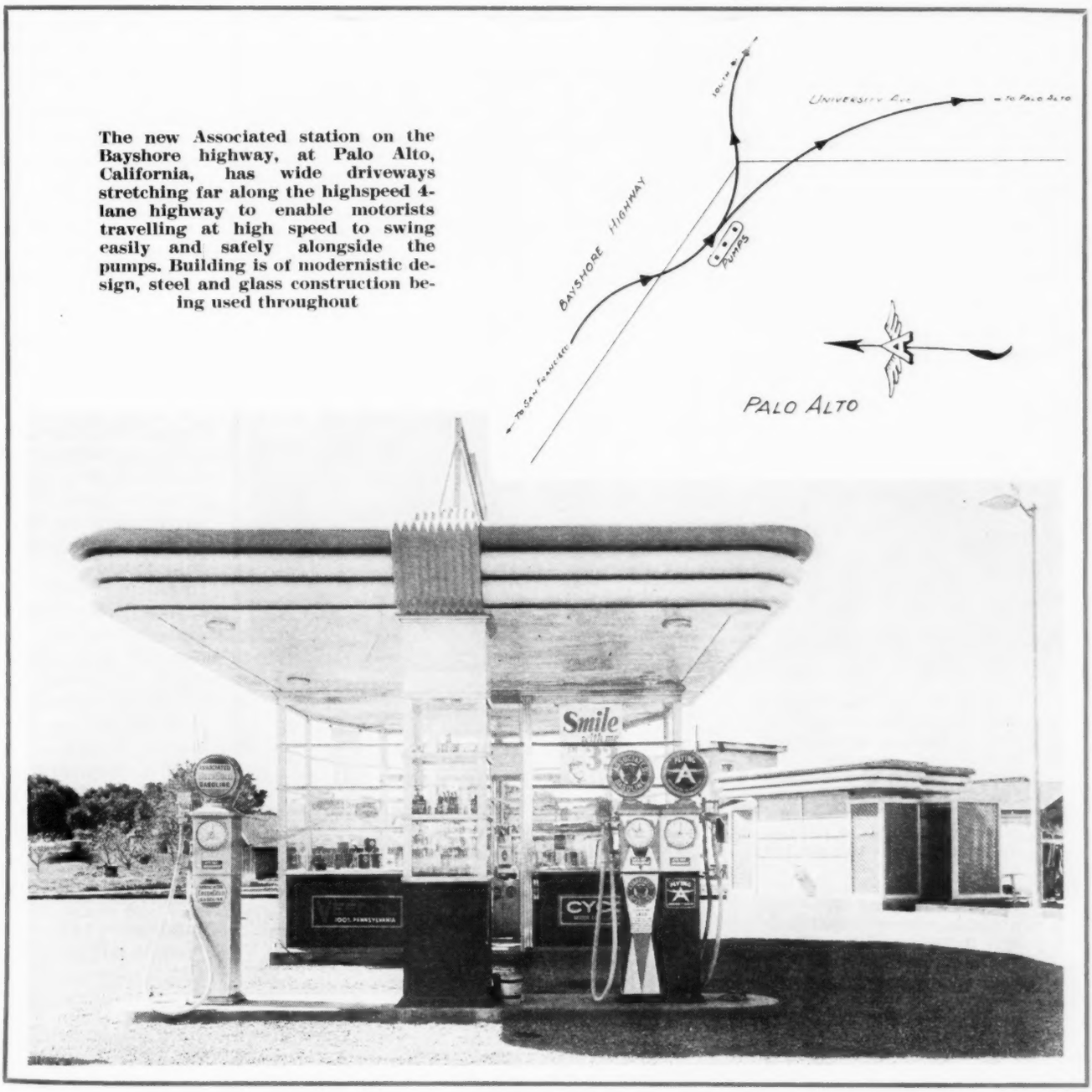
The days of the old single standard type of service station building are no more. Associated Oil Co. considers its locations individually, works out its plans for natural traffic flow through each location, and secures leading architects to design the necessary buildings in accordance. The result is a wide variety of types of buildings and arrangement, usually of steel and glass construction, and distinctively modernistic architecture in harmony with surroundings.

Details of the application of this technique can best be understood through a study of six new Associated stations in the San Francisco bay region, and of a seventh now being planned.

On the Bayshore highway at Palo Alto, its engineers were faced with conditions of a high speed corner, on a high speed, four-lane arterial. Surrounding buildings in the thinly settled vicinity were of very moderate cost. A large proportion of the business was to be obtained from transient customers on the Bayshore highway.

The problem was successfully met by constructing a thoroughly modern steel and glass station of modernistic design but of moderate cost, with extremely wide gravelled drives extending a considerable distance down the highway, so the motorist travelling at high speed, upon spotting the station, could swing off easily and safely into the drive and come to an easy stop beside the pumps. Grease rack and comfort stations are detached from the service station building for maximum convenience and to

Located on a high speed corner of a high speed 4-lane arterial, the Bayshore Highway, at Redwood City, near San Francisco, this new Associated station features wide gravelled drives extending far along the highway in each direction. Thus the motorist travelling at high speed, upon spotting the Associated sign, or at night the indirectly lighted glass medalions on the tower, can swing safely and easily to a stop beside the pump island. Construction is modernistic, but of moderate cost, to blend with the moderately priced building of the community



The new Associated station on the Bayshore highway, at Palo Alto, California, has wide driveways stretching far along the highspeed 4-lane highway to enable motorists travelling at high speed to swing easily and safely alongside the pumps. Building is of modernistic design, steel and glass construction being used throughout

eliminate obstructions for the safety of the customer.

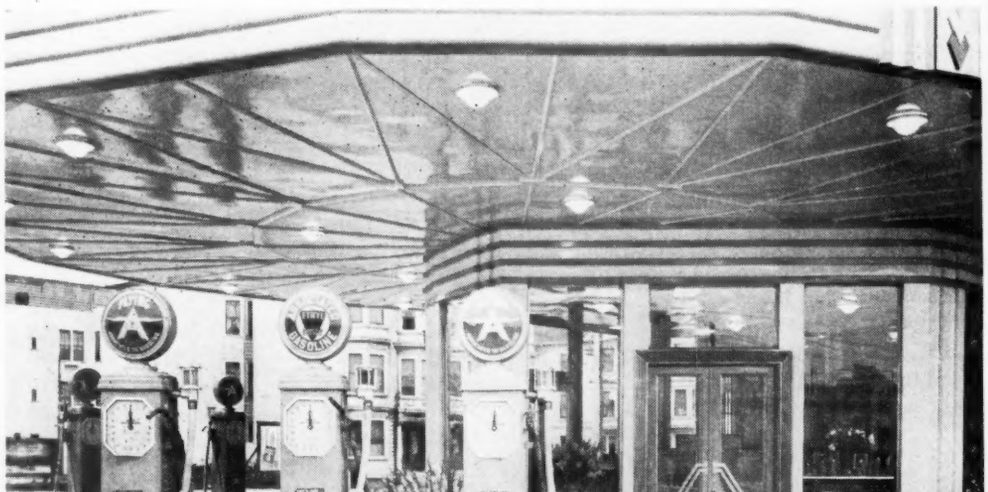
At Redwood City, on the Bayshore highway, similar conditions of a high speed arterial were encountered. In this instance, however with a shallower lot, the station was designed against the rear lot boundary, with a single pump island. A special modernistic tower, bearing an Associated medalion on each of its four sides, is visible far down the highway in each direction. The glass medalions, indirectly lighted, are as effective by night as by day.

Somewhat different conditions were encountered in the new station in Palo Alto, opposite the Stanford University stadium. Although located on the Peninsula highway, this station was also closely tied in with a residential district, the university and a nearby high school. Highway traffic would easily flow in an easy curve into the station and out again.

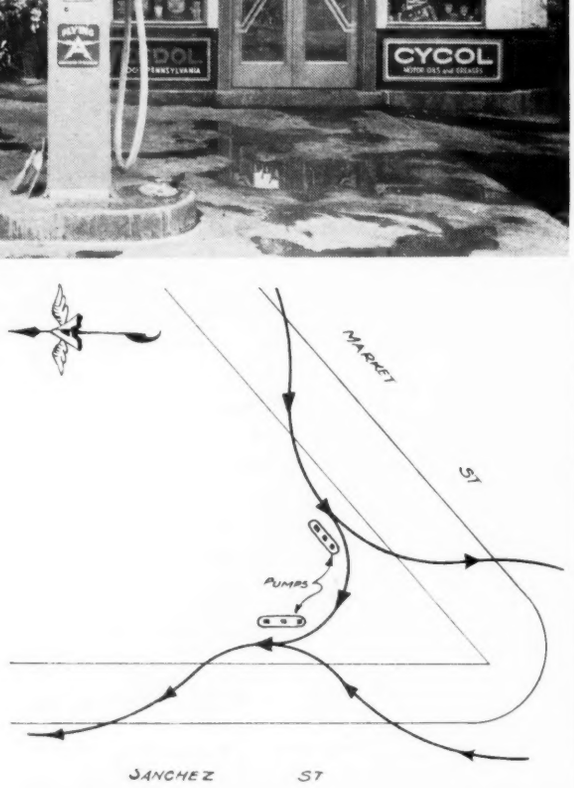
On the intersecting street, however, the natural easy traffic flow demanded that pumps be established on the portion of the lot almost diagonally opposite to those serving the highway traffic. Consequently, it was necessary to construct two distinct and separate stations on the same lot to serve both the higher speed highway traffic and the slower community traffic.

Furthermore, on this site is located a beautiful old oak tree of huge proportions. To destroy this tree would have been to mar the beauty of the spot. Hence the station was designed around it, and its beauty was enhanced by careful architectural treatment and colorful planting of native growths. Architecture is Early Californian, with cast iron columns, hand made tile roofs and rough whitewashed brick walls giving the appearance of adobe.

Entirely unique in design is the new Associated station at Market and Sanchez Streets, in



Cantilever roof construction finds its first application to service station engineering in this new Associated station at Market and Sanchez Streets, in San Francisco. The lot is a peculiar gore, with a natural traffic flow into the station from both streets. Two islands serve the two traffic streams, and over the whole is a large metal canopy, unsupported by pillars. The station is octagonal in shape, with grease rack and service equipment in an adjoining building in the rear. Architecture is distinctly modernistic, the theme being accentuated by the lack of obstructing posts



San Francisco. The location, a peculiar gore fronting both on the city's main artery and a residential side street intersecting Market on an acute angle, showed a natural traffic flow swinging in and out again on each side of the gore.

To solve the problem, engineers worked out the first cantilever type station ever built on this design, with a broad circular canopy, unsupported by pillars extending out around three sides of the station proper. The building itself is octagonal, with grease rack, battery and tire service quarters adjoining in the rear. Two pump islands placed under the overhanging steel canopy, respectively parallel to the two streets, are entirely free from the usual supporting columns, providing an effect of trimness and ease of access which is immediately noticeable. A large neon sign adjacent to the building and toward the point of the gore, is visible for a considerable distance in each direction. Architecture is distinctively modernistic.

At Bay and Laguna Streets, in San Francisco, a rectangular corner lot was obtained. Immediately in the rear was a large municipal gas plant, but the station's clientele was to be drawn chiefly from the select Marina residential district. Here an unusual three-winged structure was erected, the two wings toward each street providing canopies over pump islands, and the third wing being devoted to a grease rack and service equipment. Thus a pump island was placed in the path of the natural in-and-out traffic flow of each street, with service facilities, although in the same building, out of the way in the rear.

The new Associated station at Grand and Perkins Streets, in Oakland, although located on a corner, receives a traffic flow almost wholly from Grand. Consequently, only one island is provided for the station. Its architecture, of a modern type, blends with that of the high class residential community. Grease rack and service quarters are at the rear of the lot.

The proposed station on the corner of Ocean avenue and Junipero Serra Boulevard, in San Francisco, will present a number of entirely new problems in arrangement and architecture. Of greatest importance is the fact that the lot slopes so steeply from Ocean diagonally to Junipero Serra, that a driveway between the two is impractical from the standpoint of driver safety and convenience. Too, there is a natural flow of traffic in and out of the station from both arterials.

Engineers have met the situation with a unique design of station serving the driveways on both levels. A short flight

of steps inside the building leads from the lower level of Junipero Serra on one side, to the upper level of Ocean Avenue on the other. A pump island is provided on each driveway. Architecturally, the structure will be particularly striking in its modernistic design, with a round tower suitable for advertising display, placed in a corner to blend the roof and window levels of the upper and lower wing.

A study of the company's service stations reveals that every effort is made to harmonize facilities with the adjacent community. Many stations have been built with Early Californian, Spanish, Norman and Modern architecture purely to blend naturally with the particular neighborhood, in order that the station would immediately find public acceptance as a community asset. Such architectural treatment is far more expensive, but its cost is justified by the good will evidenced by the patronage of the community.

At present the tendency throughout the country is toward modern architecture, with its rather severe lines, but brightened by color and the use of highly polished metal surfaces. Wherever possible the Associated Oil Co. is building along these modern lines, keeping pace with progress and up-to-the-minute service to its patrons.

Eastern Code Committees To Meet June 20, 21

NEW YORK, June 12.—Two eastern regional code committees of the American Petroleum Institute, which include representatives from 15 states in New England and the Atlantic Coast, will meet in New York June 20 and 21.

The eastern region code committee will meet at noon June 20 at the Commodore Hotel.

The northeastern region code committee will meet in the A. P. I. board room, the morning of June 21.

The eastern region includes New Jersey, the Carolinas, the Virginias, Maryland, District of Columbia, Pennsylvania and Delaware.

Canned Oil Builds Confidence, Kendall Dealers Reported

BRADFORD, Pa. AFTER thoroughly testing the soundness of the idea of marketing motor oil in refinery-sealed cans, Kendall Refining Co. has gone completely over to sealed containers for their retail oil. All oil sold at retail from service stations will hereafter be sold in refinery-sealed cans. Drums will be sold only to large consumer accounts, such as fleet owners.

Retailers who stock the canned oil are required to carry at least three grades—S.A.E. 30, 40 and 50—so that they can properly service all makes of cars. In localities with severe winter climate a fourth grade, S. A. E. 20 is stocked.

Retailers find they are able to carry the three or four grades in both one and five-quart sealed containers, without larger investment than was previously required to carry a full drum of a single grade.

Prior to conducting experimental sales work, the company studied the advantages of small quantity packages and also the various types of containers. The sealed can similar to that in which food products are packed, was finally selected as being the most practical. Such containers made substitution virtually impossible and thoroughly protected the quality of the oil from refinery to car. In fact the oil is not even exposed to light until it is poured into the motor.

Six test cities were chosen, with the view of making an experimental sales test under as widely different conditions as possible. In some territories the company also distributed gasoline. In others they were in stiff competition with other oils. In others a transient winter population was encountered. However, the results from all cities showed conclusively the public was very susceptible to this means of purchasing motor oil. In fact, distributors in some territories in which tests were made stated it would be impossible for them to go back and sell oil in bulk to those consumers who had become familiar with the refinery-sealed cans.

Various means of advertising were used in the test cities, such as newspapers, billboards and radio. Meetings were held, at which company officials stressed the many advantages which this means of marketing oil brought to the dealer.

The dealers themselves brought forth additional advantages and one marked feature of the whole plan has been the enthusiasm of the better class of dealers. They have seen in it the means for reestablishing greater consumer confidence. This is due to the expressed feeling of the average motorist that he has been less subject to the fear of substitution at company-owned stations. Consequently, the independent dealer welcomes canned oil, as it places him beyond suspicion and it should result in an increase in his total motor oil sales.

Many dealers report increased total oil sales since handling the canned oil, for it enables them to sell extra cans for the consumer to carry in his car for emergency.

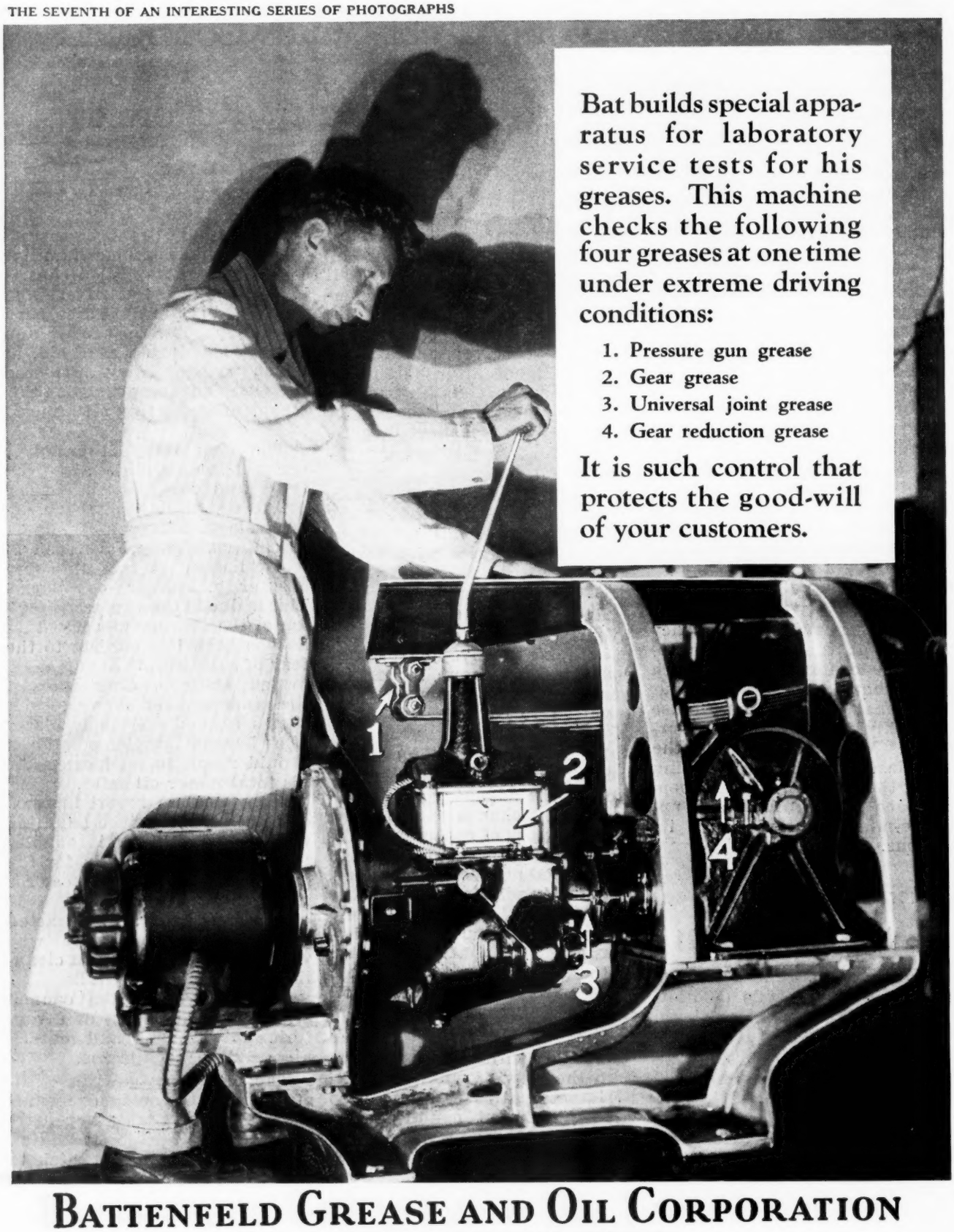
The cans have also attracted the trade of consumers who were skeptical about the cleanliness of oil sold in bulk.

Dealers also state that canned oil makes the taking of inventories much easier and materially reduces stock losses.

The company protects full measure to the consumer by putting 2% more than a net quart in each can, thus compensating for any oil that might stick to the sides of the can.

The Kendall Refining Co. has spent a large sum of money in revamping the packaging end of its business. Everything is done automatically and new equipment of the latest design has given a capacity which can be stepped up as the demand necessitates.

THE SEVENTH OF AN INTERESTING SERIES OF PHOTOGRAPHS



Bat builds special apparatus for laboratory service tests for his greases. This machine checks the following four greases at one time under extreme driving conditions:

1. Pressure gun grease
2. Gear grease
3. Universal joint grease
4. Gear reduction grease

It is such control that protects the good-will of your customers.

BATTENFELD GREASE AND OIL CORPORATION

KANSAS CITY, MISSOURI

BRANCH OFFICE AND WAREHOUSE STOCK: MINNEAPOLIS, MINN.

"Business is Ingreasing"

Refinery - Tank Wagon Markets

Advancing Prices Rule Refined Oil Markets As Mid-Continent Crude Tightens

CLEVELAND, June 12

ADVANCING prices were the rule in refined oil markets the first week in June, according to the daily market surveys of *Platt's Oilgram*. The reins tightened in nearly all refinery districts as Mid-Continent crude oil became increasingly hard to obtain. There were wide gains in gasoline prices in the more important refinery districts and other oils also began to improve.

"House cleaning" continued to hold sway in retail gasoline markets with new price structures announced by Standard of Ohio and Standard of Indiana. Narrower margins to jobbers, dealers and authorized agents and resting retail markets squarely on the shoulders of the tank car market were keynote features of the new structures. They are discussed elsewhere in this issue of NATIONAL PETROLEUM NEWS.

The talk of higher crude oil prices for the Mid-Continent became more pronounced. Refiners, paying as much as 25 cents premium, found it hard to get as much oil as they wanted. At least one large plant in Oklahoma shut down temporarily, or at least until it could get sufficient crude on which to operate on a profitable basis. One major buyer of crude in Oklahoma and Kansas was reported as unable to get but a small portion of his current requirements of 40,000 barrels daily.

Unable to get all the crude they wanted, several large refiners were forced into the market to buy gasoline to meet their current commitments. Jobbers were much more active in the market in a wave of pre-tax buying. The gasoline market situation in the Mid-Continent might not have been so tight had not buying for coastwise movement from East Texas been so heavy. Easterners likewise were anxious to get shipments rolling to the Gulf before the 0.5-cent increase in the federal tax becomes effective. Some 300 cars of gasoline were bought in East Texas by eastern companies at rising prices.

The Mid-Continent gasoline market, under the combination of the foregoing factors, resembled somewhat the "new deal" stock market. Prices advanced roughly 0.5 cent in a couple of days. They appeared to be on a firm foundation since the higher prices bid by buyers failed to bring forth more liberal offerings from refiners with gasoline to sell.

Eastern tank car prices for gasoline reflected the improvement in the Mid-Continent. Quotations generally advanced 0.25 cent. The west coast market also was in better shape. Only in Pennsylvania, where the bulk of the gasoline produced is low in octane rating, did the market remain stationary.

A slight improvement in the call for kerosine was reported in virtually all markets. Pennsylvania prices advanced 0.125 cent and quotations along the Atlantic seaboard were 0.25 cent higher. Mid-Continent prices tended higher although offerings continued to be rather free and prevented any definite advance in prices.

Increased movement of heavy fuels to industrial buyers continued to be reported from most areas. The lighter burning oils were quiet but prices remained steady.

Lubricating oil markets also were relatively quiet but prices held their own.

Sales of gasoline were reported at rising prices in the domestic cargo market at the Gulf. Foreign buyers displayed little interest in the market for refined oils but prices were marked up 0.125 to 0.25 cent a gallon.

Chicago Gasoline Prices Up 0.375 To 0.5 Cent

Staff Special

CHICAGO, June 10

ADVANCES of 0.375 to 0.5 cent in wholesale gasoline prices and announcements of further steps toward bettering the retail marketing situation in the middle west were the high spots of the week ended June 10 in the Chicago market.

Several factors contributed largely toward the increase in open market gasoline prices. Chief among them was the belief among traders that the contemplated increase of 0.5 cent in the federal gasoline tax would actually go into effect next week. This assumption caused quite a lot of gasoline buying by jobbers and dealers, as gasoline purchased and shipped prior to the effective date of the tax increase would not be subject to it, it was thought.

Summary of Group 3 Quotations for U. S. Motor Gasoline

In Effect June 12, 1933

	59 Octane and Below	60-64 Octane No.	65 Octane and Above
Okla.	2.75-2.875	3.25	3.50
Kans.	2.75-2.875	3.125-3.25	3.375-3.50
N. Tex.	2.75-2.875	3.25-3.375	3.50-3.625
W. Tex.	2.75-2.875	3.25-3.375	3.50-3.625
E. Tex.	2.75	3.25	3.50
La.-Ark.	2.75	3.25	3.50
Ind.-Ill.	.....	.....	.....

Prices are those quoted on the basis of f.o.b. Group 3 by refiners in the districts designated.

Another factor was the growing tightness of the crude oil market. A number of refiners either were closed down or forced to curtail operations due to lack of crude supplies and these refiners were buying gasoline in the open market to fulfill some of their contractual obligations. These refiners reported it exceedingly difficult to obtain much gasoline for prompt shipment and were forced to pay higher prices in their efforts to get material. Refiners who were in a position to ship generally were unwilling to sell for other than immediate delivery at day-to-day prices and in most cases would not sell for future shipment at a flat price.

Tank car marketers reported it quite

Prices A Year Ago

June 13, 1932

	Oklahoma	Penna.
58-60 U. S. Motor (57-65 Octane No. in Okla.)	5.50-5.75	6.50-7.00
Grade 26-70, Natural Gasoline	2.25	.....
Kerosine (Okla. 41-43; Pa. 47 w.w.)	3.125-3.50	5.125-5.375
Fuel Oil (Okla. 24-26; Pa. 36-40)	$0.425-$0.45	3.25-3.50
Crude (Okla. 35-35.9)	$0.90	$1.97
Chicago tank wagon (including 3c tax)	.....	16.00c

difficult to obtain gasoline, even from their regular sources of supply and in most cases they were not already "long" any quantity of material. One reason for not going long was that refiners have been unwilling to sell much for delayed shipment and another was that open market gasoline buying had been so light that most traders did not want much on hand.

Gasoline prices generally were advanced 0.375 to 0.5 cent during the week, with most of the advances coming during the closing days. Only small quantities of U. S. Motor, 59 octane number and below, were reported available June 10 at under 2.5 cents and a number of sellers asked 0.25 cent more than that. This compared to a price range on that grade of 2 to 2.125 cents up to June 8.

Announcements early in the week by Standard of Indiana and other large and small marketing companies of changes in quantity discounts to their gasoline dealers, effective by July 1, also lent bullishness to the general market. These changes, generally amounting to reductions of 0.5 to 1.5 cents in dealers margins and making the dealer absorb part of any local price cut in his city, encouraged the belief among most traders that there would be an advance in retail gasoline prices before very long.

Demand for kerosine showed considerable improvement during the week. Weather conditions were favorable to increased consumption and the market was active enough to remove all distress material. Published prices were unchanged over the week, but a number of sellers who had been shading 2.25 cents for 41-43 w.w. kerosine advanced to that figure.

Furnace and gas oils were steady and fairly hard to obtain at present price levels. Buying was in large enough volume to keep prices more inclined to higher than lower levels.

Fuel oils were fairly active among certain classes of buyers. Industrial plants continued inquiring for material, but distributors of home burner fuels were not in the market.

Chicago Tank Car Market

Following prices are in cents per gallon, except fuel oil in barrels, in tank car lots, representing majority of sales to jobbers on Group 3 freight basis, although shipments may originate in other refining districts, such as North, West and East Texas, Louisiana, Arkansas, Indiana, Illinois, Kentucky, etc. Prices do not include state or federal taxes levied on some products.

	Prices June 12	Prices June 5	Prices May 29
50-52, 437 e.p. naphtha	2.75	2.00	2.00
U. S. Motor Gasoline, *by octane numbers:			
59 and below	2.75	2.00 – 2.125	2.00 – 2.25
60-64	3.00 – 3.25	2.375– 2.75	2.375– 2.75
65 and above	3.25 – 3.50	2.75 – 3.00	2.75 – 3.00
60-62, 400 e.p. gasoline, *by octane numbers:			
59 and below	2.75	2.00 – 2.25	2.125– 2.375
60-64	3.00 – 3.25	2.50 – 2.75	2.50 – 2.75
65 and above	3.25 – 3.50	2.75 – 3.00	2.75 – 3.00
64-66, 375 e.p. gasoline	2.875	2.625– 2.75	2.625– 2.75
68-70, 350-360 e.p. gasoline	3.00	2.75 – 2.875	2.75 – 2.875
Aviation Gasoline, below 73 octane number	3.375– 3.625	3.25 – 3.50	3.25 – 3.50
41-43 water white kerosine	2.375– 2.50	2.25 – 2.375	2.375– 2.625
42-44 water white kerosine	2.50 – 2.625	2.375– 2.625	2.50 – 2.75
38-40 prime white Furnace Oil	1.625– 1.75	1.625– 1.75	1.625– 1.75
38-40 straw Furnace Oil	1.50 – 1.625	1.50 – 1.625	1.625
32-36 dark gas oil	0.875– 1.00	0.75 – 1.00	0.75 – 1.00
32-36 dark zero gas oil	1.50	1.50	1.50 – 1.625
32-36 straw zero gas oil	1.50 – 1.75	1.50 – 1.75	1.625– 1.75
28-30 zero fuel oil (per bbl.)	$0.60 –$0.65	$0.625–$0.675	$0.625–$0.675
28-30 fuel oil (per bbl.)	$0.50 –$0.55	$0.50 –$0.55	$0.50 –$0.55
24-26 fuel oil (per bbl.)	$0.35 –$0.40	$0.35 –$0.40	$0.35 –$0.40
18-22 fuel oil (per bbl.)	$0.275–$0.30	$0.275–$0.30	$0.275–$0.30
18-22 zero fuel oil (per bbl.)	$0.425–$0.45	$0.425–$0.45	$0.425–$0.45
14-16 fuel oil (per bbl.)	$0.25 –$0.275	$0.25 –$0.275	$0.25 –$0.275

*Octane numbers are determined by C.F.R. motor method (ASTM D 357-33T).

Naphtha and Solvent

(Prices are in cents per gallon, in tank car lots, as quoted by Chicago sellers)

	June 12		June 5	
	F.O.B. Group 3 Basis	F.O.B. Chicago District	F.O.B. Group 3 Basis	F.O.B. Chicago District
Stoddard Solvent	4.25 – 4.50	7.00 – 9.00	4.00 – 4.50	7.00 – 9.00
V. M. & P. Naphtha	4.50 – 5.00	7.50	4.50 – 5.00	7.50
Cleaners Naphtha	4.75 – 5.25	9.00	4.75 – 5.25	9.00
Oleum Spirits	4.00 – 4.25	6.00	3.75 – 4.00	6.00
Rubber Solvent	4.50 – 5.00	10.00	4.50 – 5.00	10.00
Lacquer Diluent	6.25 – 6.75	9.50	6.25 – 6.75	9.50

Mid-Continent Refinery Markets

Prices Improve With Talk Of Higher Crude

Staff Special
TULSA, June 10

A DECIDED improvement in the Mid-Continent refined oils market was noted the week ended June 10 as talk of higher crude prices became more prevalent.

Gasoline set the pace. Prices advanced 0.25 to 0.5 cent in virtually all districts and all grades were scarcer in the open market than they had been for some time.

This scarcity was caused by several factors. The East Texas refiners were in an excellent position as a result of repeated coastwise buying. Late in the week approximately 300 cars of U. S. Motor of 400 end point was bought for coastwise movement and the purchaser was forced to pay 2.25 cents for the latter portion of his purchase in order to get his cargo completed.

East Texas refiners were refusing to accept any business for shipment north except in cases where immediate instructions were furnished, and then the acceptances were for two- and three-car lots.

The coastwise buying took care of the East Texas refiners and the increased demand generally took care of refiners in other districts. One refiner who says he needs more crude which he cannot obtain now was in the market throughout the week for more than 100 cars of U. S. Motor to use for his third grade, and approximately 200 cars of middle and high octane gasoline. He was having considerable difficulty obtaining the requirements and reports June 10 indicated he had not yet completed his purchases.

This refiner was not alone in search for gasoline. Three or four other refiners were in the market for smaller amounts and resellers were combing the market for gasoline to apply on orders they had received. Jobbers were more active than they had been for some time as far as open market buying was concerned.

The result of all this activity, in the face of the fact that several plants which normally could supply much of the open market demand were cramped because of insufficient crude, was an advance in gasoline prices and the report June 10 that "there wasn't any gasoline around even at the new price levels."

Natural gasoline showed new life in sympathy with the better refined gasoline market. Orders were in larger volume in a few quarters and some new buying for shipment to the Gulf was done late in the week. Prices had advanced 0.125 to 0.25 cent by the close of business June 10.

Kerosine buying showed an increase this week after several days of inactivity and a downward trend. Material was scarcer at present than it had been for several days. The price trend was reversed although no actual advances of consequence had been made prior to June 10.

Several traders were anticipating an improved kerosine market later this month as harvesting gets under way in the middle west. The fact that even during the slack demand recently the East Texas refiners continued to move their kerosine indicated a real demand for the product in anticipation of an increased consumption later in the summer.

Furnace oil was extremely scarce. Buyers in the open market continued to look to East Texas but were unsuccessful in obtaining all their requirements. Little of the material was in storage and fewer refiners were making the oil since they were taking all the gasoline they could out of the crude they were able to obtain at present.

Industrial buyers of gas oil were active most of the week and there was less material available for the open market. Refiners with cracking facilities were not in the market as sellers but were cracking their gas oil and in some instances buying on the outside. There was an increase in inquiries also for the low cold test gas oil, some of the inquiries being for deferred shipment, indicating an inclination to buy now for storage purposes.

One refiner reported a definite increase in fuel oil buying by steel and implement manufacturing companies the past week. Others also reported several inquiries from resellers who had indicated an increase in industrial buying.

No changes were made in bright stock prices. Refiners reported demand fairly good. Neutral oils prices were steady.

Wax demand was brisk and refiners were having to turn down orders because of inability to fill them at present. Most wax manufacturers in the Mid-Continent reported their current production already was sold and their stocks had been depleted considerably the past few days. Prices advanced 0.125 to 0.25 cents a pound with little material offered at the higher price levels.

California Refinery Market

Gasoline Prices Show Little Change

LOS ANGELES, June 8

ALTHOUGH there was considerable talk of higher prices for petroleum products on the Pacific coast within the near future, current quotations were practically unchanged from those of a week ago.

Members of the export trade reported some demand for cased kerosine and gasoline from Pacific foreign areas, although more favorable exchange rates have not produced the anticipated increase in inquiries. Decreased inquiry from the Orient for bulk kerosine distillate caused some shading of spot quotations of that commodity. A 27 plus oil was reported available at $0.90 to $0.95 with slightly better qualities bringing $0.95 to $1.05 per barrel.

In domestic markets, gasoline was in plentiful supply at prices of 9.25 to 10.25 cents. These prices were for products of independents' plants and included all taxes. Third-grade major brands and the better grades of some independent refiners were quoted at 10.5 to 10.9 cents, delivered.

Improved quotations on gasoline by Mid-Continent refiners made it possible for California suppliers to hope for business from out-of-state accounts in Utah, Arizona and Idaho. One supplier reported a bid of 5.25 cents on a couple of cars of gasoline to an Arizona account failed to get the business. He thought the deal went to a major California refiner at a slightly lower figure.

Spot quotations for this out-of-state business ranged from 5 cents up, with a possibility of shading to 4.75 cents on a firm offer.

In the heavier oils, fuel oil quotations were slightly improved, ranging from $0.40 to $0.50 per barrel. Some suppliers talked $0.65 for fuel oil within the near future. Gas and diesel oils were moderately lower with warmer weather and decreased export takings affecting the demand.

Refinery Markets on Light Oils and Lubricants

Prices given below are in cents per gallon, except where $ is shown in tank car lots, f.o.b. Refinery. They represent prices made only to domestic jobbers who resell to the consuming public, except where otherwise noted. Tank car prices do not include state or federal taxes levied on some products.

(These Refinery Prices compiled in the OIL PRICE HANDBOOK for a whole year)

GASOLINE AND NAPHTHA

	Prices June 12	Prices June 5	Prices May 29
OKLAHOMA (F. o. b. Oklahoma refineries)			
50-52, 450 e.p. naphtha...	2.625– 2.75	2.125– 2.25	2.125– 2.25
U. S. Motor Gasoline			
59 octane and below...	2.75 – 2.875	2.25 – 2.375	2.25 – 2.375
60-64 octane number...	3.25	2.625– 2.75	2.625– 2.75
65 octane and above...	3.50	2.75 – 3.00	2.75 – 3.00
60-62, 400 E.P. Gasoline..			
59 octane and below...	2.75 – 2.875	2.25 – 2.375	2.25 – 2.375
60 64 octane number..	3.25 – 3.375	2.625– 2.75	2.625– 2.75
65 octane and above...	3.50 – 3.625	2.875– 3.00	2.875– 3.00
64-66, 375 E.P. Gasoline..	2.875– 3.125	2.625– 2.75	2.625– 2.75
68-70 350-360 e.p. gasoline	3.00 – 3.25	2.75 – 2.875	2.75 – 2.875
Aviation Gasoline:			
Below 73 Octane number	3.375– 3.625	3.25 – 3.375	3.25 – 3.50
WESTERN PENNSYLVANIA			
52-54 Naphtha.....	3.75 – 4.00	3.75 – 4.00	3.75 – 4.00
54-56 Naphtha.....	4.00 – 4.25	4.00 – 4.25	4.00 – 4.25
U. S. Motor (58-62).....	4.50 – 4.75	4.50 – 4.75	4.50 – 4.75
64-66 390 e.p. gasoline...	4.625– 4.75	4.625– 4.75	4.625– 4.75
68-70 350-360 e.p.....	4.75 – 4.875	4.75 – 4.875	4.75 – 4.875
OHIO (Quotations of S. O. Ohio. Delivered any point in Ohio.)			
U. S. Motor Gasoline....	5.55	5.55	5.55
60-65 Octane number....	Discontinued	5.925	5.925
Above 65 Octane number	6.30	6.30	6.30
KANSAS (F. o. b. refinery, Kansas destination)			
U. S. Motor Gasoline			
59 octane and below...	2.875– 3.00	2.25 – 2.375	2.25 – 2.375
60-64 octane number..	3.25 – 3.375	2.75 – 2.875	2.75 – 2.875
65 octane and above...	3.50 – 3.75	3.00 – 3.125	3.00 – 3.125
60-62 400 e.p. gasoline...	2.875– 3.125	2.375– 2.50	2.375– 2.50
NORTH TEXAS‡ (F. o. b. Wichita Falls district refineries for unrestricted shipment)			
U. S. Motor Gasoline			
59 octane and below...	2.75 – 2.875	2.25 – 2.375	2.25 – 2.375
60-64 octane number..	3.25 – 3.375	2.625– 2.75	2.625– 2.75
65 octane and above...	3.50 – 3.625	2.75 – 3.00	2.75 – 2.875
60-62 400 e.p. gasoline...	2.75 – 3.00	2.25 – 2.50	2.25 – 2.50
64-66 375 e.p. gasoline...	2.875– 3.125	2.625– 2.875	2.625– 2.875
68-70 350-360 e.p. gasoline	3.00 – 3.25	2.75 – 3.00	2.75 – 3.00
WEST TEXAS‡ (F. o. b. West Texas refinery for unrestricted shipment)			
U. S. Motor Gasoline			
59 octane and below...	2.75 – 2.875	2.25 – 2.375	2.25 – 2.375
60-64 octane number..	3.25 – 3.375	2.625– 2.75	2.625– 2.75
65 octane and above...	3.50 – 3.625	2.75 – 3.00	2.75 – 2.875
EAST TEXAS‡ (F. o. b. East Texas refineries for unrestricted shipment)			
U. S. Motor Gasoline			
59 octane and below...	2.75	2.125– 2.25	2.125– 2.25
60-64 octane number..	3.25	2.50 – 2.625	2.50 – 2.625
65 octane and above...	3.50	2.75 – 2.875	2.75 – 2.875
NORTH LOUISIANA (For Louisiana and Arkansas destination)			
U. S. Motor Gasoline			
59 octane and below...	3.00	2.50	2.50
60-64 octane number..	3.375	2.875	2.875
65 octane and above...	3.625	3.125	3.125
ARKANSAS (For Arkansas and Louisiana destination)			
U. S. Motor Gasoline			
59 octane and below...	3.00	2.50	2.50
60-64 octane number..	3.375	2.875	2.875
65 octane and above...	3.625	3.125	3.125

Note: Octane numbers shown above in Oklahoma, Kansas, Texas, Louisiana and Arkansas, are determined by C. F. R. motor method. (A. S. T. M. D 357 — 33 T).

‡Refiners generally receive 0.25c to 0.5c per gallon more for gasoline and kerosine for local or differential territory shipment.

†Prices Nominal. ††Only one refiner Quoting. *Quotations only.

	Prices June 12	Prices June 5	Prices May 29
CALIFORNIA (3c tax to be added to California gasoline prices if used in state.)			
54-58 U.S. Motor, 437 e.p.	5.25 – 7.50	5.50 – 7.50	5.25 – 7.50
54-58 U.S. Motor, 437 e.p. for outside state shipment	5.00 – 5.75	4.75 – 5.75	4.75 – 5.50
43-45 Engine Distillate 445-480 e.p	4.75 – 5.75	4.50 – 5.75	4.50 – 5.75

NATURAL GASOLINE

OKLAHOMA (F. o. b. Group 3)			
Grade 26-70.....	1.25 – 1.375	1.00	1.00
NORTH TEXAS (F. o. b. Breckenridge)			
Grade 26-70.....	1.25 – 1.375	1.00	1.00
CALIFORNIA (F. o. b. plants in the Los Angeles basin).			
75-85, 375-390 e.p. for blending.....	4.00 – 4.50	3.75 – 4.25	3.75 – 4.25

BURNING OILS

WESTERN PENNSYLVANIA			
45 w.w. kerosine.....	4.125– 4.25	4.00 – 4.125	4.00 – 4.125
46 w.w. kerosine.....	4.125– 4.375	4.125– 4.25	4.125– 4.25
47 w.w. kerosine.....	4.375– 4.50	4.375– 4.50	4.375– 4.50
OKLAHOMA (F. o. b. Oklahoma refineries)			
41-43 w.w. kerosine.....	2.375– 2.75	2.375– 2.625	2.50 – 2.75
42-44 w.w. kerosine.....	2.625– 2.875	2.625– 2.75	2.625– 2.875
KANSAS (F. o. b. refinery Kansas destination)			
41-43 w.w. kerosine.....	2.50 – 2.75	2.625– 2.875	2.625– 2.875
42-44 w.w. kerosine.....	2.75 – 2.875	2.875– 3.00	2.875– 3.00
NORTH TEXAS‡ (F. o. b. Wichita Falls district refineries for unrestricted shipment)			
41-43 w.w. kerosine.....	2.50 – 2.625	2.50 – 2.625	2.375– 2.625
NORTH LOUISIANA‡ (For Louisiana and Arkansas destination)			
41-43 w w. kerosine.....	2.875– 3.00	2.875– 3.00	3.00
ARKANSAS‡ (For Louisiana and Arkansas destination)			
41-43 w.w kerosine.....	3.00	3.00	3.00
CALIFORNIA (F. o. b. California refineries)			
38-40 w.w. kerosine.....	3.50 – 4.25	3.50 – 4.25	3.50 – 4.25

NEUTRAL OIL

WESTERN PENNSYLVANIA

Viscous Neutrals (Viscosity at 70° F.)

Vis.			
200 (180 at 100) No. 3 color 420-425 flash:			
Zero pour test.....	20.25 –20.50	20.25 –20.50	19.75 –20.00
10 pour test.....	19.25 –19.50	19.25 –19.50	18.75 –19.00
15 pour test.....	18.25 –18.50	18.25 –18.50	17.75 –18.00
25 pour test.....	17.50 –17.75	17.50 –17.75	17.00 –17.25
180 No. 3 color, 410-415 flash:			
25 pour test.....	16.25 –16.50	16.25 –16.50	15.75 –16.00
150 No. 3 color, 400-405 flash:			
Zero pour test.....	17.50 –18.00	17.50 –18.00	17.00 –17.50
10 pour test.....	17.00 –17.50	17.00 –17.50	16.50 –17.00
15 pour test.....	15.50 –15.75	15.50 –15.75	15.00 –15.25
25 pour test.....	14.75 –15.00	14.75 –15.00	14.25 –14.50

Refinery Markets Wax, Lubricants, Heavy Oil

Prices given below are in cents per gallon, except where $ is shown in tank car lots, f.o.b. Refinery. They represent prices made only to domestic jobbers who resell to the consuming public, except where otherwise noted. Tank car prices do not include state or federal taxes levied on some products.

(For quick reference to Refinery Prices, get the OIL PRICE HANDBOOK, published annually)

MID-CONTINENT (F. o. b. Mid-Continent Refineries)

Vis.	Color	Prices June 12 0 to 10 Pour Point	Prices June 12 15 to 30 Pour Point	Prices June 5 0 to 10 Pour Point	Prices June 5 15 to 30 Pour Point
			(Viscosity at 100° F.)		
100	No. 2..	4.50	4.00	4.50	4.00
150	No. 3..	6.50	6.00	6.50	6.00
150	No. 4..	6.25	5.75	6.25	5.75
180	No. 3..	7.75	7.25	7.75	7.25
180	No. 4..	7.50	7.00	7.50	7.00
180	No. 5..	7.25	6.75	7.25	6.75
200	No. 3..	8.25	7.50	8.25	7.50
200	No. 4..	8.00	7.25	8.00	7.25
200	No. 5..	7.75	7.00	7.75	7.00
220	No. 3..	9.25	8.75	9.25	8.75
220	No. 4..	9.00	8.50	9.00	8.50
220	No. 5..	8.75	8.25	8.75	8.25
240	No. 3..	10.25	9.50	10.25	9.50
240	No. 4..	10.00	9.25	10.00	9.25
240	No. 5..	9.75	9.00	9.75	9.00
280	No. 3..	11.25	10.50	11.25	10.50
280	No. 4..	10.75	10.25	10.75	10.25
280	No. 5..	10.50	10.00	10.50	10.00

SOUTH TEXAS (F. o. b. South Texas refineries)

Vis.	Color	Prices June 12	Prices June 5	Prices May 29
		(Viscosity at 100° F., pour test 0)		
200	No. 3 Pale.....	5.50 – 6.00	5.50 – 6.00	5.50 – 6.00
300	No. 3 Pale.....	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50
500	No. 3½ Pale.....	7.00 – 7.50	7.00 – 7.50	7.00 – 7.50
750	No. 4 Pale.....	8.00	8.00	8.00
1200	No. 4 Pale.....	9.00	9.00	9.00
200	No. 5½ Red Oil...	5.00 – 5.50	5.00 – 5.50	5.00 – 5.50
300	No. 5½ Red Oil...	5.50 – 6.00	5.50 – 6.00	5.50 – 6.00
500	No. 6 Red Oil.....	6.50 – 7.00	6.50 – 7.00	6.50 – 7.00
750	No. 6 Red Oil.....	7.50	7.50	7.50
1200	No. 5-6 Red Oil...	8.50	8.50	8.50

Note: Red oil prices shown above cover oils with blue cast; one or two refiners ask 0.5c to 1c per gallon higher for green cast red oils.

CALIFORNIA (F. o. b. California refineries)

Vis.	Color			
		(Viscosity at 100° F.)		
100	No. 3.....	10.00	10.00	10.00
150	No. 3.....	10.00	10.00	10.00
200	No. 3.....	10.00	10.00	10.00
300	No. 3.....	11.50	11.50	11.50
450	No. 3.....	12.00	12.00	12.00
500	No. 3.....	12.00	12.00	12.00
550	No. 3.....	12.50	12.50	12.50
600	No. 3.....	12.50	12.50	12.50
100	No. 5.....	10.00	10.00	10.00
200	No. 5.....	10.00	10.00	10.00
300	No. 5.....	11.50	11.50	11.50
400	No. 5.....	12.00	12.00	12.00
500	No. 5.....	12.00	12.00	12.00
600	No. 5.....	12.50	12.50	12.50
700	No. 7.....	12.50	12.50	12.50
800	No. 7.....	13.00	13.00	13.00

CYLINDER STOCKS

MID-CONTINENT (F. o. b. Mid-Continent refineries)
(Prices represent quotations and Sales)

190-200 Vis. D at 210° Bright Stock.....	20.50	20.50	19.75
150-160 Vis. D at 210° Bright Stock:			
0-10 cold test.....	17.75	17.75	17.00
10-25 cold test.....	17.25	17.25	16.50
25-40 cold test.....	16.75	16.75	16.00
150-160 Vis. E 210° Bright Stock.....	16.75	16.75	16.00
600 St. Ref. Olive Green..	4.00 – 5.50	4.00 – 5.50	4.00 – 5.50
600 St. Ref. Dark Green..	3.50 – 4.50	3.50 – 4.50	3.50 – 4.50
630 Steam Refined.....	7.75	7.75	7.75
Black Oil.....	2.50 – 2.625	2.50 – 2.625	2.50 – 2.625

WESTERN PENNSYLVANIA (A. S. T. M. Tests)

600 Steam Refined.....	11.50 –11.75	11.50 –11.75	11.00 –11.25
650 Steam Refined.....	13.75 –14.00	13.75 –14.00	13.25 –13.50
600 Flash.....	14.75 –15.00	14.75 –15.00	14.25 –14.50
630 Flash.....	19.75 –20.00	19.75 –20.00	19.25 –19.50
600 Warren E.....	15.25 –15.50	15.25 –15.50	14.75 –15.00
Bright Stock, No. 8 color, 140-150 vis. at 210°, 540-550 flash:			
10 pour test.....	23.50 –24.00	23.50 –24.00	23.00 –23.50
15 pour test.....	21.50 –22.00	21.50 –22.00	21.00 –21.50
25 pour test.....	20.50 –21.00	20.50 –21.00	20.00 –20.50

††Only one refiner quoting. †Prices Nominal.

WAX

	Prices June 12	Prices June 5	Prices May 29
WESTERN PENNSYLVANIA (Per pound, F. o. b. New York)			
122-124 white crude scale a.m.p.....	2.375– 2.50	2.25 – 2.375	2.25 – 2.30
124-126 white crude scale a.m.p.....	2.50 – 2.625	2.375– 2.50	2.30 – 2.375
****OKLAHOMA** (Per pound in barrels; in a few instances, per pound in burlap bags; F. o. b. Oklahoma refineries.)			
124-126 White Crude Scale, a.m.p.....	2.00 – 2.25	2.00 – 2.125	1.90 – 2.125
CHICAGO (F. o. b. Chicago district refineries, in cents per pound, in bags, carload lots. Melting points are A.S.T.M. method; add 3° F. to convert into A.M.P.)			
122-124 fully refined.....	3.40 – 3.50	3.40 – 3.50	3.40 – 3.50
125-127 fully refined.....	3.65 – 3.75	3.65 – 3.75	3.65 – 3.75
127-129 fully refined.....	3.80 – 3.90	3.80 – 3.90	3.80 – 3.90
130-132 fully refined.....	4.40 – 4.50	4.40 – 4.50	4.40 – 4.50
132-134 fully refined.....	4.65 – 4.75	4.65 – 4.75	4.65 – 4.75
135-137 fully refined.....	5.40 – 5.50	5.40 – 5.50	5.40 – 5.50

GAS AND FUEL OIL

WESTERN PENNSYLVANIA (For outside Pittsburgh district)			
36-40 fuel oil.....	3.25 – 3.50	3.25 – 3.50	3.25 – 3.50
OKLAHOMA (F. o. b. Oklahoma refineries)			
38-40 Straw Furnace Oil..	1.625– 1.875	1.625– 1.875	1.625– 1.875
32-36 straw gas oil.....	1.00 – 1.125	1.00 – 1.125	0.875– 1.125
32-36 straw gas oil zero...	1.625– 1.875	1.625– 1.875	1.625– 1.875
32-36 dark gas oil.....	1.00 – 1.125	1.00 – 1.125	0.875– 1.125
32-36 dark gas oil zero...	1.625– 1.75	1.625– 1.75	1.625– 1.75
28-30 fuel oil,zero(perbbl.)	$0.625–$0.675	$0.60 –$0.65	$0.625–$0.675
28-30 fuel oil (per bbl.)...	$0.45 –$0.50	$0.45 –$0.50	$0.45 –$0.50
24-26 fuel oil (per bbl.)...	$0.325–$0.425	$0.325–$0.425	$0.325–$0.40
22-26 fuel oil (per bbl.)...	$0.325–$0.40	$0.325–$0.40	$0.325–$0.375
18-22 fuel oil (per bbl.)...	$0.325–$0.425	$0.325–$0.425	$0.325–$0.375
16-20 fuel oil (per bbl.)...	$0.30 –$0.35	$0.30 –$0.35	$0.30 –$0.35
14-16 fuel oil (per bbl.)...	†$0.30 –$0.35	†$0.30 –$0.35	†$0.30 –$0.35
KANSAS (F. o. b. refinery Kansas destination)			
38-40 straw Furnace Oil..	1.875– 2.125	1.875– 2.125	1.875– 2.125
18-22 fuel oil (per bbl.)...	$0.40 –$0.45	$0.40 –$0.45	$0.40 –$0.45
10-14 fuel oil (per bbl.)...	$0.325–$0.375	$0.325–$0.375	$0.325–$0.375
NORTH TEXAS (F. o. b. Wichita Falls district refineries for unrestricted shipment)			
38-40 straw Furnace Oil..	1.625– 1.75	1.625– 1.75	1.50 – 1.75
38-40 prime white Furnace Oil.....	1.75 – 1.875	1.75 – 1.875	1.625– 1.875
32-36 gas oil, zero.....	1.75	1.625– 1.75	1.625– 1.75
32-36 gas oil.....	1.00 – 1.125	1.00 – 1.125	1.00 – 1.125
24-26 fuel oil (per bbl.)...	$0.35 –$0.40	$0.375–$0.40	$0.40 –$0.425
18-22 fuel oil (per bbl.)...	$0.30 –$0.35	$0.30 –$0.35	$0.30 –$0.35
WEST TEXAS (F. o. b. West Texas refineries for unrestricted shipment)			
32-36 gas oil, zero.....	1.625	1.50 – 1.625	1.50 – 1.625
18-22 fuel oil (per bbl.)...	$0.475–$0.50	$0.475–$0.50	$0.475–$0.50
NORTH LOUISIANA (For Louisiana and Arkansas destination)			
32-36 gas oil.....	1.75 – 1.875	1.75 – 1.875	1.75 – 2.00
32-36 gas oil, zero.....	2.25	2.25	2.25
14-16 fuel oil (per bbl.)...	$0.35 –$0.375	$0.35 –$0.375	$0.35 –$0.375
ARKANSAS (For Arkansas and Louisiana destination)			
32-36 gas oil.....	1.75 – 1.875	1.75 – 1.875	1.75 – 2.00
32-36 gas oil, zero.....	2.25	2.25	2.25
28-30 gas oil, zero.....	1.75 – 2.00	1.75 – 2.00	1.75 – 2.00
20-24 fuel oil (per bbl.)...	$0.45 –$0.475	$0.45 –$0.475	$0.45 –$0.475
9-12 fuel oil (per bbl.)...	$0.35 –$0.375	$0.35 –$0.375	$0.35 –$0.375
CALIFORNIA (F. o. b. refinery)			
14-18 fuel oil (per bbl.)..	$0.40 –$0.50	$0.35 –$0.45	$0.375–$0.475
14-18 Bunker oil (per bbl.)	$0.50 –$0.55	$0.50 –$0.55	$0.50 –$0.55
30-34 gas oil (per bbl.)....	$0.80 –$0.90	$0.80 –$0.90	$0.80 –$0.90
27 Plus Diesel oil (per bbl.)	$0.75 –$0.85	$0.75 –$0.85	$0.75 –$0.85

PETROLATUMS

WESTERN PENNSYLVANIA (Per pound, in barrels, carload lots, f. o. b. Penna. refinery. In tank cars 0.625c to 0.75c per pound less.) Quotations are from majority of refiners.

Snow White.....	6.25 – 6.50	6.25 – 6.50	6.25 – 6.50
Lily White.....	5.00 – 5.50	5.00 – 5.50	5.00 – 5.50
Cream White.....	4.125– 4.50	4.125– 4.50	4.125– 4.50
Light Amber.....	2.25 – 2.50	2.25 – 2.50	2.25 – 2.50
Amber.....	2.00 – 2.25	2.00 – 2.25	2.00 – 2.25
Red.....	1.875– 2.00	1.875– 2.00	1.875– 2.00

*Quotations only. **Prices represent quotations and sales.

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Eastern Domestic Markets

Gasoline, Kerosine Quoted Higher

Staff Special

NEW YORK, June 10

GASOLINE markets showed additional improvement along the Atlantic seaboard during the week ended June 10. Quotations were advanced 0.25 cent on high and low octane grades early in the week. The market at the higher postings was steady with indications of further advances appearing frequently. No changes in retail prices were reported, but fractional increases were expected in some districts.

Considerable jobber buying was reported in anticipation of the increase in the federal tax but this flurry was short lived, when it was learned that the interim between the passage of the tax bill and the effective date would be short. Many jobbers had their storage full and others could not get deliveries on tank car and barges promptly enough to get under the wire. However, buying was comparatively brisk during the week-end trading and suppliers' reports generally revealed comfortable inventories.

The gasoline market at New York harbor was generally quoted at 5 cents on above 65 octane material and 4.75 cents on the lower octane grades. The majority of sales were made at those prices with suppliers generally reluctant to quote very far in advance.

The Philadelphia market was 0.25 cent higher for both grades of gasoline over the quotations of the previous week. Suppliers reported that sales had increased at the new postings.

The Baltimore market improved noticeably. Jobber buying was spasmodic but sales at 4.75 and 5 cents for the low and high octane grades, respectively, were frequently reported as jobbers sought to keep their storage filled up in anticipation of increased taxes. This market was steadier than it has been in past weeks.

Spot markets in New England were marking time. Quotations on high octane gasoline were unchanged at 5 cents at Boston and Providence with little demand for low octane noted. Shipments against contracts were heavy. A slight increase in consumption was reported in some districts. Several dealers in Maine were playing with retail prices in an effort to test the suppliers' willingness to protect their profit margins. It was said that in most districts the new structure of prices was being successfully maintained.

A shortage in the supplies of kerosine along the seaboard brought about a stiffening in the price in most markets. Quotations were advanced from 4.75 to 5 cents in the key markets.

Heavy oils were in good demand with many local suppliers scouting the market for supplies. Bunker oil, Grade C, was steady at the posted price of $0.75 per barrel. Diesel oil was unchanged at $1.65 per barrel in the key markets.

Cargo market at the Gulf featured an advancing trend of prices. Distress offerings of gasoline had completely dried up as far as could be learned. Several inquiries for July cargoes received little attention from suppliers. A general reluctance to quote on future business was noted on every turn. It was said that tank car material in East Texas was scarce.

Foreign buyers continued to place current business with Roumanian suppliers, but American suppliers advanced export grades of gasoline 0.125 cent. Kerosine and gas oils were boosted 0.125 to 0.25 cent. Cargo lots of bunker oil were in demand and difficult to obtain at under $0.55 per barrel. Most suppliers were asking $0.60 per barrel for this product.

Inquiry for cargo lots of crude oil continued active despite the few sales reported. Most suppliers were asking $0.70 per barrel and instances were rare where this price was shaded.

Wax Markets

Scale Prices Up 0.125 Cent

NEW YORK, June 10.—Scale waxes were in good demand at New York and New Orleans during the week just ended. Supplies available for prompt shipment were taken up quickly in early trading and prices advanced generally 0.125 cent.

As the week ended, suppliers were asking 2.5 cents for 124-126 A.m.p. and a general survey indicated that the quantities available at that price were not large. Production of scale waxes was on the decline with many refiners said to be sold up through July.

Fully refined grades were steady in price despite the sluggishness of the spot market. Shipments on contracts were fairly active. Some suppliers were looking for fractional advances in these grades in the near future.

Pennsylvania Markets

Prices Generally Steady

CLEVELAND, June 12.—Prices of most oils were steady in the western Pennsylvania refinery market last week. Kerosine and wax were quoted higher. Trading generally was only moderately active but this did not tend to disturb the price structure.

Offerings of wax remained exceptionally scarce. Several refiners reported they were sold up until the middle of July or the first of August and consequently were not in position to take advantage of the higher bids of buyers. White crude scale, on the few offerings made, brought 0.125 cent higher and one refiner with scale the melting point of which is a little above average reported a sale at 2.625 cents a pound. The Bureau of Mines figures for April which appeared June 7 and which showed another sharp drop in wax stocks provided more bullish ammunition.

The gasoline market remained easy. Offerings were plentiful but refiners did not appear disposed to cut prices to stimulate movement. The plant of one refiner was closed down, however, due to full gasoline storage.

The position of kerosine improved. Dumping in the upper part of the field ceased early in the week and prices generally were advanced 0.125 cent. There was a slight increase in jobbing demand.

Lubricating oils marked time. Trading was less active but prices showed no signs of easing. Signs of more big-company buying appeared late in the week but prices had shown no reaction up to the close of business Saturday.

Fuel oil was steady to higher.

Jobber Wins Suit on Sale Of Marketing Company

KANSAS CITY, Mo., June 3.—L. Q. Skidmore, president of the Skidmore-Milton Oil Co. here, was the winner of $29,304 in a suit brought against H. F. Wilcox Oil & Gas Co., Tulsa.

The suit grew out of the sale of 22 service stations and one bulk plant by the Skidmore company to the Wilcox company in 1929 for around $200,000. As part of the transaction, Mr. Skidmore received 1300 shares of stock with a guaranteed value for one year. When the value declined, he brought suit.

The Wilcox company alleged that the contract had been repudiated when Mr. Skidmore organized the present Skidmore-Milton Oil Co.

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Tank Wagon, Service Station Markets for Gasoline and Kerosine

(OIL PRICE HANDBOOK has t.w. and s.s. markets for a whole year, arranged for quick reference)

Tax column includes 1c federal tax, state gasoline tax; also city and county taxes as indicated in footnotes

These Prices in Effect June 12, 1933, as Posted by Principal Marketing Companies

Latest Changes in Tank Wagon Markets

Motor Gasoline

S .O. New York—Through oversight the 0.3c increase, thru territory, **June 3** was not reported in these notes in June 7 issue. Prices, however, were changed to reflect this advance in the table of that issue.

Atlantic Refining—T.w. and s.s. up 0.3c, thru New England, **June 3.**

T.w. and s.s. revised upward, thru New Jersey, Maryland and North Carolina, **June 2.** At points published in this table, increases ranged from 2c to 3.8c.

T.w. and s.s. up 2.3c, Richmond, to 17.8c and 18.8c, **June 3.**

S. O. Ohio—2c cash discount at s.s. thru Cuyahoga county eliminated **June 7.**

S. O. Kentucky—**Crown** gasoline:

T.w. and s.s. cut 1c, Pensacola, to 19c, **May 25.**

T.w. and s.s. up 1c, Atlanta, to 19c, **June 2.**

T.w. and s.s. cut 1c, Augusta, to 18c, **May 30;** up 1c, to 19c, **June 2.**

T.w. and s.s. cut 0.5c, Vicksburg, to 16c, **May 31.**

Kyso Green: T.w. and s.s. cut 1c, Pensacola, to 15c, **May 25.**

T.w. and s.s. cut 2c, Jackson, to 12c, **May 27.**

T.w. and s.s. up 1c, Atlanta, to 16c, **June 2.**

T.w. and s.s. cut 1c, August, to 15c, **May 30;** up 1c, to 16c, **June 2.**

T.w. and s.s. cut 0.5c, Vicksburg, to 14c, **May 31.**

S. O. Louisiana—S.s. cut 0.5c, Bristol, to 21.1c, **June 7.**

Magnolia Petroleum — Mobilgas: t.w. and s.s. up 2.4c, Little Rock, with 4.5c given off t.w. price to dealers, **June 2.**

Metro: t.w. only cut 1c, Fort Smith, to 11.5c, including 5c tax, **June 1.**

Continental Oil—T.w. only cut 1c, thru Montana, except Butte unchanged, **June 1.** Same date, spread between t.w. and s.s. prices of Ethyl and Conoco (regular) grades cut to 2c, and on third grade, to 1c, thru Montana. Ethyl t.w. is 2.5c over regular, and third grade is 1c under regular.

This affected Montana points published in this table thus: Butte s.s. cut 1c, to 22c, with t.w. unchanged at 20c; Helena t.w. cut 1c, s.s. cut 2c, to 20c and 22c respectively.

These same spreads were also put into effect in Colorado, Wyoming, Utah, and southern Idaho, **June 5,** by revising s.s. prices thus:

Denver and Pueblo cut 1c, to 16c; Grand Junction cut 1c, to 18c; Casper cut 2c, to 17c; Cheyenne cut 1c, to 16c; Salt Lake City cut 1c, to 18c; Boise up 0.5c, to 22c; and Twin Falls cut 1.5c, to 22c.

T.w. prices were revised at the following points, **June 5,** thus establishing the 2c spread:

Boise, up 1.5c, to 20c; cut 0.5c, Twin Falls, to 20c; and cut 1c, Casper, to 15c.

Similar changes were made on third grade gasoline; new prices are published in this table.

A discount schedule to dealers, and lease and license accounts, also went into effect June 5, thru territory, except New Mexico, giving them 2.5c off s.s. price on Conoco gasoline, and 1.5c on third grade. Governmental agencies and consumers pay the posted t.w. price.

S. O. California—Standard and Flight gasolines, t.w. and s.s. up 1.5c, thru Oregon and Washington, **June 5.**

Gasoline prices up 1c, thru Oregon, to cover increase in state tax, to 5c, **June 9.**

Aviation Gasoline

S. O. New Jersey—Correction: Baltimore t.w. price was cut 1c, to 19c, May 11 rather than to 20c, as reported on page 43 of the May 24 issue. A 1c cut on Feb. 22 had brought the price to 20c, not previously reported in this publication.

Kerosine

S. O. Kentucky—Cut 2c, Tampa, to 10c t.w., **May 25.**

Cut 2c, Birmingham, to 11c t.w., **June 3.**

S.O. NEW JERSEY TERRITORY

	Essolene Posted Tank Car	Retail T.W.	Taxes	Posted S.S.	Kerosine T.W.
Atlantic City, N. J.	5.7	12.2	4	17.2	11.2
Newark, N. J.	4.9	11.4	4	16.4	8.5
Annapolis, Md.	5.3	11.8	5	17.8	9
Baltimore, Md.	4.8	11.3	5	17.3	8
Cumberland, Md.	6.3	12.8	5	18.8	11.7
Washington, D. C.	5	11.5	3	15.5	10
Danville, Va.	6.4	12.9	6	19.9	9.9
Norfolk, Va.	4.9	11.4	6	18.4	10.3
Petersburg, Va.	5.7	12.2	6	19.2	11.4
Richmond, Va.	5.3	11.8	6	18.8	10.7
Roanoke, Va.	6.5	13	6	20	11
Charleston, W. Va.	5.7	12.2	5	18.2	11.6
Parkersburg, W. Va.	5	11.5	5	17.5	10.2
Wheeling, W. Va.	5.7	12.2	5	18.2	11.2
Charlotte, N. C.	7.1	13.6	7	21.6	12.5
Hickory, N. C.	7.4	13.9	7	21.9	12.7
Mt. Airy, N. C.	7.4	13.9	7	21.9	12.8
Raleigh, N. C.	6.9	13.4	7	21.4	12.3
Salisbury, N. C.	7.2	13.7	7	21.7	12.6
Charleston, S. C.	4.9	11.4	7	19.4	10.3
Columbia, S. C.	6.7	13.2	7	21.2	12.2
Spartanburg, S. C.	7.1	13.6	7	21.6	12.5

Note: Posted retail t.w. prices which are being continued mostly to satisfy existing contracts based on them, are fixed at 1c under posted s.s. prices. T.w. prices shown above are exclusive of taxes.

Price basis to dealers: Dealer contracts for Essolene are written at 2½c over posted tank car prices. Lease and license dealers, 1c per gal. rental, 0.5c license.

Price basis to commercial consumers: on Essolene, on t.w. deliveries on yearly basis, over posted tank car prices: 1,000 to 74,999 gals., 2.5c; 75,000 to 299,999 gals., 1.5c; 300,000 gals. and over, 1c.

Cash discounts at service stations: on Essolene, 2c off posted s.s. price, thru territory.

Kerosine Discount: 1c off t.w. price for 25 gals. or more, under contract thru territory except New Jersey and Baltimore, Md.

S. O. NEW YORK

	Socony Gasoline T.W.	Tax	Total T.W.	S.S.	Kerosine T.W.
Greater New York City: Boroughs of Manhattan, Bronx, Queens & Kings	11.5	4	15.5	16.5	8
Borough of Richmond	11.5	4	15.5	16.5	7
Albany, N. Y.	11.6	4	15.6	16.6	9
Buffalo, N. Y.	12.5	4	16.5	17.5	9
Rochester, N. Y.	12.7	4	16.7	17.7	9
Syracuse, N. Y.	12.3	4	16.3	17.3	9.5
Boston, Mass.	11.5	4	15.5	16.5	8
Augusta, Me.	12	5	17	18	9
Manchester, N. H.	12.7	5	17.7	18.7	8
Burlington, Vt.	13.3	5	18.3	19.3	8.5
New Haven, Conn.	11.7	3	14.7	15.7	8
Providence, R. I.	11.5	3	14.5	15.5	8

Dealer discount: on gasoline 2c off posted t.w. price, except 3c in New York City.

Cash discounts at service stations: on gasoline, at some points, at least temporarily, cash discounts of 2c are being given off posted s.s. price.

ATLANTIC REFINING

	Atlantic White Flash Gasoline				
Pittsburgh, Pa.	9.5	4	13.5	14.5	9
Philadelphia, Pa.	9.5	4	13.5	14	9
Allentown, Pa.	9.5	4	13.5	14.5	9
Erie, Pa.	9.5	4	13.5	14.5	9
Scranton, Pa.	9.5	4	13.5	14.5	9
Altoona, Pa.	9.5	4	13.5	14.5	9
Dover, Del.	9.5	4	13.5	14.5	9
Wilmington, Del.	9.5	4	13.5	14.5	9
Boston, Mass.	11.5	4	15.5	16.5	8
Springfield, Mass.	12.1	4	16.1	17.1	8
Worcester, Mass.	12	4	16	17	8
Fall River, Mass.	11.8	4	15.8	16.8	8
Providence, R. I.	11.5	3	14.5	15.5	8

Above prices include these inspection fees on both gasoline and kerosine, per gallon, figured on basis of 50 gallons per barrel:

Alabama, 1/40c on gasoline, 1/2c on kerosine; Arkansas, 1/5c per gal. in a single barrel, 1/20c per gal. in bulk; Florida, 1/8c; Illinois, 3/100c; Indiana, 1/2c per gal. in a single barrel; 3/10c per gal. in lots of 2 to 10 bbls., 1/5c for 10 to 50 bbls., 2/25c for over 50 bbls.; Kansas, 1/50c, (3/50c can be charged to meet inspection department expenses); Louisiana, 1/32c; Minnesota, 2/25c; Missouri, gasoline, 1.5c per bbl., in lots of 10 bbls. or more; Nebraska, 3/50c; North Carolina, 1/4c; North Dakota, 1/2c; Oklahoma, 2/25c per gal. in lots of more than 50 bbls., 1/5c in lots less than 50 bbls.; South Carolina, 1/8c; South Dakota, 1/10c; Tennessee, 2/5c; and Wisconsin, 1/25c.

Kerosine inspection fees only: Iowa, 2/25c; Michigan, 4/5c per gal. for first 2 bbls.; 3/5c for next 3; 2/5c for next 5; 3/10c for next 15, and 1/5c per gal. in lots over 25 bbls.

Tank Wagon, Service Station Markets for Gasoline and Kerosine

Tax column includes 1c federal tax, state gasoline tax; also city and county taxes as indicated in footnotes
These Prices in Effect June 12, 1933, as Posted by Principal Marketing Companies

ATLANTIC REFINING (Cont'd)

Atlantic White Flash Gasoline

	T.W.	Tax	Total T.W.	S.S.	Kerosine T.W.
Hartford, Conn.	11.9	3	14.9	15.9	8
New Haven, Conn.	11.7	3	14.7	15.7	8
Atlantic City, N. J.	12.2	4	16.2	17.2	9
Camden, N. J.	11.7	4	15.7	16.7	9.5
Trenton, N. J.	11.8	4	15.8	16.8	9
Annapolis, Md.	11.8	5	16.8	17.8	9
Baltimore, Md.	11.3	5	16.3	17.3	8
Hagerstown, Md.	12.3	5	17.3	18.3	9
Richmond, Va.	11.8	6	17.8	18.8	10.7
Wilmington, N. C.	11.5	7	18.5	19.5	10.4
Brunswick, Ga.	12	7	19	20	*13
Jacksonville, Fla.	10	8	18	19	9.5

Dealer discount: on gasoline "aplit dealers," 2c off posted t.w. price; to 100% dealers, 2.5c; to authorized dealers (under lease 1c per gal.), 2.5c off posted s.s. price. Commercial accounts, under contract for one year, are sold at a discount off the posted prices, with due consideration to competition.

*Georgia kerosine prices include 1c state tax.

S. O. OHIO

Sohio X-70 Gasoline

Ohio statewide	10	5	15	16	10.5

Renown Green (Third Grade)

Ohio statewide		5	....	14	10.5

Tankwagon discount to dealers and commercial consumers: Sohio X-70, 2c off t.w. price and Renown Green, 1.5c off s.s. price. Kerosine, 2.5c off t.w.

Commercial discount at service stations: on Sohio X-70, to commercial users (trucks, buses) 2c off s.s. price.

S. O. KENTUCKY

Crown Gasoline

Lexington, Ky.	12.5	6	18.5	18.5	10
Louisville, Ky.	10	6	16	16	10
Paducah, Ky.	13	6	19	19	9
Covington, Ky.	11	6	17	17	11.5
Jackson, Miss.	9	7	16	16	*12
Vicksburg, Miss.	9	7	16	16	*12
Birmingham, Ala.	13	*8	21	21	11
Mobile, Ala.	9	*8	17	17	8
Montgomery, Ala.	13	*9	22	22	*14
Macon, Ga.	12	7	19	19	*13
Atlanta, Ga.	12	7	19	19	*10
Augusta, Ga.	12	7	19	19	9
Savannah, Ga.	12	7	19	19	*14
Jacksonville, Fla.	11	8	19	19	12.5
Miami, Fla.	11	8	19	19	12
Tampa, Fla.	11	8	19	19	10
Pensacola, Fla.	10	*9	19	19	14

Kyso Green (Third Grade)

Lexington, Ky.	9.5	6	15.5	15.5	10
Louisville, Ky.	8	6	14	14	10
Paducah, Ky.	9.5	6	15.5	15.5	9
Covington, Ky.	9	6	15	15	11.5
Jackson, Miss.	5	7	12	12	*12
Vicksburg, Miss.	7	7	14	14	*12
Birmingham, Ala.	10	*8	18	18	11
Mobile, Ala.	6	*8	14	14	8
Montgomery, Ala.	10	*9	19	19	*14
Atlanta, Ga.	9	7	16	16	*10
Augusta, Ga.	9	7	16	16	*9
Macon, Ga.	9	7	16	16	*13
Pensacola, Fla.	6	*9	15	15	14

Dealer Discount: on Crown and Crown Ethyl gasolines, 3c off t.w. price thru territory; Kyso Green 2c. Effective Nov. 21, in Jefferson county, Ala., including Birmingham, major oil companies give 2c per gal. off s.s. price for cash, to buyers at stations, in any quantity. Effective Jan. 14, 1933, 2c per gal. discount off s.s. price for cash at Louisville by S. O. Kentucky.

***Taxes:** in the tax columns are included these city and county gasoline taxes at the following points: Birmingham, 1c city; Mobile, 1c city; Montgomery, 1c city and 1c county; Pensacola, 1c city. Georgia and Mississippi kerosine prices include 1c state tax; Montgomery kerosine price includes ½c city tax.

S. O. INDIANA

Standard Red Crown Gasoline

	T.W.	Tax	Total T.W.	S.S.	Kerosine T.W.
Chicago, Ill.	8.6	4	12.6	12.6	8
Decatur, Ill.	9	4	13	13	8.5
E. St. Louis, Ill.	8.3	4	12.3	12.3	7.8
Joliet, Ill.	9	4	13	13	8.5
Peoria, Ill.	9	4	13	13	8.5
Quincy, Ill.	8.8	4	12.8	12.8	8.3
Springfield, Ill.	9	4	13	13	8.5
Indianapolis, Ind.	9.2	5	14.2	14.2	‡12.7
Evansville, Ind.	9	5	14	14	‡12.5
South Bend, Ind.	9.5	5	14.5	14.5	‡13
Detroit, Mich.	9.5	4	13.5	13.5	9
Grand Rapids, Mich.	9.2	4	13.2	13.2	8.7
Saginaw, Mich.	9.5	4	13.5	13.5	9
Marquette, Mich.	9.8	4	13.8	13.8	9.3
Green Bay, Wisc.	9.2	5	14.2	14.2	8.7
Madison, Wisc.	8.9	5	13.9	13.9	8.4
Milwaukee, Wisc.	8.7	5	13.7	13.7	8.2
La Crosse, Wisc.	9.8	5	14.8	14.8	9.3
Minneapolis, Minn.	9.4	4	13.4	13.4	8.9
Duluth, Minn.	9.7	4	13.7	13.7	8.9
Mankato, Minn.	9.3	4	13.3	13.3	8.8
Des Moines, Ia.	9.1	4	13.1	13.1	8.6
Davenport, Ia.	9.1	4	13.1	13.1	8.6
Sioux City, Ia.	8.7	4	12.7	12.7	8.2
Mason City, Ia.	9.1	4	13.1	13.1	8.6
St. Louis, Mo.	7.7	*3.5	11.2	11.2	7.2
Kansas City, Mo.	8.2	†4	12.2	12.2	7.7
St. Joseph, Mo.	7.8	†4	11.8	11.8	7.3
Fargo, N. D.	11.1	4	15.1	15.1	10.6
Grand Forks, N. D.	14.4	4	15.4	15.4	10.9
Minot, N. D.	11.1	4	15.1	15.1	10.6
Pierre, S. D.	10	5	15	15	9.5
Huron, S. D.	10.3	5	15.3	15.3	9.8
Wichita, Kan.	7.1	4	11.1	11.1	6.6
Bartlesville, Okla.	7.5	5	12.5	15	8

Note: Kerosine s.s. prices are generally 3c above normal t.w. price.

Stanolind Gasoline (Third Grade)

Stanolind prices are 1c under Red Crown, thru territory, except at following points:

Bartlesville, Okla.	6	5	11	12	8

†Includes city tax of 1c. *Includes city tax of 0.5c. ‡Includes 4 cent state tax.

O.D.A. (Effective May 4, 1931):

Discounts to resellers, except in Chicago, all quantities per month:
Off s.s. under 75,000 gals.: Ethyl: 3c, Red Crown 2.5c, Stanolind 1.5c. Off t.w. over 75,000 gals.: Ethyl 4c, Red Crown, 3.5c, Stanolind 2c.

Chicago reseller discounts: any quantity Ethyl 4c, "regular" 3.5c, third grade 2c, by principal marketers. Discounts are off s.s. below 75,000 gals., and off t.w. above 75,000 gals.

Consumer discounts, off t.w., outside Chicago, (effective June 1, 1933): 500 gals. or more per month. Ethyl and Red Crown 2c, Stanolind 1c.

Chicago consumer discounts, off t.w. (effective June 1, 1933): 500 gals. or more per month, Ethyl and Red Crown, 2.5c, Stanolind, 1.5c.

Note: New discount schedule going into effect July 1, 1933.

S. O. NEBRASKA

Standard Red Crown Gasoline

Omaha, Neb.	9.3	5	14.3	15.3	8
McCook, Neb.	10.8	5	15.8	16.8	8.5
Norfolk, Neb.	9.8	5	14.8	15.8	8
North Platte, Neb.	10.8	5	15.8	16.8	9
Scottsbluff, Neb.	10.8	5	15.8	16.8	9.5

Reliance Gasoline (Third Grade)

Normally, Reliance gasoline prices are 1c below Red Crown, beginning June 1, 1933.

Dealer discount: on gasoline off normal s.s. prices: Ethyl 3c; Red Crown 2.5c; Reliance 1c.

S. O. LOUISIANA

	Essolene Posted Tank Car	Posted Retail T.W.	Taxes	Posted S.S.	Kerosine T.W.
Little Rock, Ark.	3.9	9.9	7	17.9	10
Alexandria, La.	3.9	9.9	*7	17.9	*8.5
Baton Rouge, La.	4	10	6	17	*10
New Orleans, La.	3.8	9.8	*7	17.8	*11
Lake Charles, La.	4	10	*7	18	*10
Shreveport, La.	2.8	8.8	6	15.8	*11
Lafayette, La.	4.1	10.1	*7	18.1	*10
Bristol, Tenn.	6.6	12.6	8	21.1	13
Chattanooga, Tenn.	5.9	11.9	8	20.9	11
Knoxville, Tenn.	6.2	12.2	8	21.2	12.5
Memphis, Tenn.	4.6	10.6	8	19.6	10
Nashville, Tenn.	5.5	11.5	8	20.5	10

*Lake Charles, Alexandria, New Orleans and Lafayette gasoline tax includes 5c state tax, 1c federal tax, and 1c parish tax. Louisiana kerosine prices include 1c state tax; New Orleans includes also 1c parish tax.

Note: Posted retail t.w. gasoline prices, being continued mostly to satisfy existing contracts based on them, are fixed at 1c under posted s.s. prices. T.w. prices shown above are exclusive of taxes.

Cash discounts at service stations: on Essolene, 2c per gal. thru territory, effective June 2, 1933.

Price basis to dealers: prices to uncontrolled dealer accounts, 2.5c over tank car prices, and controlled dealers, thru new lease and license agreements, get 0.5c additional, or 2c over t.c. price, effective June 2, 1933.

Price basis to commercial consumers: on t.w. deliveries, on yearly basis, figured over posted tank car prices: 1,000 to 74,999 gals., 2.5c over; 75,000 to 299,999 gals., 1.5c; and 300,000 gals. and over, 1c.

MAGNOLIA PETROLEUM

	Mobilgas T.W.	Tax	Total T.W.	S.S.	Kerosine T.W.
Muskogee, Okla.	7.5	5	12.5	15	6
Oklahoma City.	6.5	5	11.5	14	8
Tulsa, Okla.	7.5	5	12.5	15	8
Fort Smith, Ark.	8.5	†5	13.5	13.5	9
Little Rock, Ark.	10.9	7	17.9	17.9	10
Texarkana, Ark.	9	*5	14	14	11
Dallas, Tex.	7.5	5	12.5	15	7.5
El Paso, Tex.	8.5	5	13.5	16	8
Fort Worth, Tex.	7.5	5	12.5	15	7.5
Houston, Tex.	7.5	5	12.5	15	8
San Antonio, Tex.	8.5	5	13.5	16	8

Metro Gasoline (Third Grade)

Muskogee, Okla.	6	5	11	12	6
Oklahoma City.	5	5	10	11	8
Tulsa, Okla.	6	5	11	12	8
Fort Smith, Ark.	6.5	†5	11.5	12.5	9
Little Rock, Ark.	7	7	14	14	10
Texarkana, Ark.	4	5	9	10	11
Dallas, Tex.	5	5	10	11	7.5
El Paso, Tex.	6	5	11	12	8
Fort Worth, Tex.	5	5	10	11	7.5
Houston, Tex.	5	5	10	11	8
San Antonio, Tex.	6	5	11	12	8

Dealer discounts: on Mobilgas 2.5c off t.w. price at Fort Smith and Texarkana; at Little Rock, 4.5c off. On Metro gasoline, 1c per gal. off t.w. price thru territory. Arkansas kerosine prices, 2c discount off t.w. price.

***In Texarkana, 4c Texas tax applies; outside Texarkana, 6c Arkansas tax applies.**

†In Fort Smith, 4c Oklahoma tax applies; outside Fort Smith, 6c Arkansas tax applies.

CONTINENTAL OIL

Conoco Gasoline

Denver, Col.	9	5	14	16	11
Pueblo, Col.	9	5	14	16	12.5
Grand Junc, Col.	11	5	16	18	14.5
Casper, Wyo.	10	5	15	17	10
Cheyenne, Wyo.	9	5	14	16	12.5
Butte, Mont.	14	6	20	22	17
Helena, Mont.	14	6	20	22	17
Salt Lake City, Utah	11	5	16	18	16
Boise, Ida.	14	6	20	22	18
Twin Falls, Ida.	14	6	20	22	18
Albuquerque, N. M.	8	6	14	17	12

Third Grade Gasoline

Denver, Col.	8	5	13	14	11
Cheyenne, Wyo.	8	5	13	14	12.5
Helena, Mont.	13	6	19	20	17
Salt Lake City, Utah	10	5	15	16	16
Boise, Ida.	13	6	19	20	18
Albuquerque, N. M.	*	6	*	14	12

*Not sold thru tank wagon.

Discounts, effective June 1, 1933: to dealers, and lease and license accounts, off s.s. price, thru territory, except N. Mex.: Conoco gasoline, 2.5c; third grade, 1.5c.

Consumers and governmental agencies pay posted t.w. price.

S. O. CALIFORNIA

Standard Gasoline

San Francisco, Cal.	11	4	15	17.5	12.5
Los Angeles, Cal.	10	4	14	16.5	12.5
Fresno, Cal.	11.5	4	15.5	18	14
Phoenix, Ariz.	11.5	6	17.5	20	†16
Reno, Nev.	13.5	5	18.5	21	15.5
Portland, Ore.	12	6	18	20.5	13.5
Seattle, Wash.	12	6	18	20.5	13.5
Spokane, Wash.	15	6	21	23.5	18
Tacoma, Wash.	12	6	18	20.5	13.5

Flight Gasoline (Third Grade)

San Francisco, Cal.	9	4	13	14	12.5
Los Angeles, Cal.	7.9	4	11.9	12.9	12.5
Fresno, Cal.	9.5	4	13.5	14.5	14
Reno, Nev.	11.5	5	16.5	17.5	15.5
Phoenix, Ariz.	9	6	15	16	†16
Portland, Ore.	10	6	16	17	13.5
Seattle, Wash.	10	6	16	17	13.5
Tacoma, Wash.	10	6	16	17	13.5
Spokane, Wash.	13	6	19	20	18

†Includes 5c state tax.

Discounts: On all gasolines: to 100% dealers, 1c off t.w. price thru territory.

Tank Wagon, Service Station Markets for Gasoline and Kerosine

Tax column includes 1c federal tax, state gasoline tax; also city and county taxes as indicated in footnotes

These Prices in Effect June 12, 1933, as Posted by Principal Marketing Companies

CANADA

Prices of Imperial Oil Ltd.

(Per Imperial Gallon, which is 1.2 U. S. Gallons)

Imperial Three Star Gasoline

Hamilton, Ont.	16.5	6	22.5	25.5	15.5
Toronto, Ont.	16.5	6	22.5	25.5	15.5
Brandon, Man.	22	7	29	32.5	20.5
Winnipeg, Man.	19	7	26	29.5	17.5
Regina, Sask.	23	6	29	33	21.5
Saskatoon, Sask.	25	6	31	35	23.5
Edmonton, Alta.	23.5	6	29.5	33.5	22.5
Calgary, Alta.	20	6	26	30	19
Vancouver, B. C.	19.5	7	26.5	29.5	22.5
Montreal, Que.	16	6	22	25	15
St. John, N. B.	17.5	7	24.5	28.5	20.5
Halifax, N. S.	17.5	6	23.5	27.5	20.5

Aviation Gasoline Prices

Following are tank wagon prices of aviation gasoline in principal marketing territories (Stanavo aviation in all territories except Magnolia Petroleum and Continental Oil Co.). Tax column includes 1c federal tax, and state tax; also municipal taxes as indicated in footnotes.

S. O. NEW JERSEY

Prices in Effect June 12, 1933

	T.W.	Tax	Total T.W.
Newark, N. J.	15	1	16
Baltimore, Md.	14	5	19
Washington, D. C.	15.3	3	18.3

Discounts: to dealers and contract consumers, 2c per gal. off posted t.w. price.

COLONIAL BEACON OIL CO.

New York City	16	4	20
Boston, Mass.	17	4	21

S. O. PENNSYLVANIA

Philadelphia, Pa.	12.5	4	16.5
Pittsburgh, Pa.	15	4	19
Altoona, Pa.	15	4	19
Harrisburg, Pa.	12.5	4	16.5

Discounts: to dealers and contract consumers 2c per gal. off posted t.w. price.

S. O. OHIO

Thru Ohio	15	5	20

Discounts: to airports, 1 to 4c, based on quantity.

S. O. INDIANA

Chicago, Ill.	11.6	4	15.6
Indianapolis, Ind.	12.2	5	17.2
Detroit, Mich.	12.5	4	16.5
Milwaukee, Wisc.	11.7	5	16.7
Minneapolis, Minn.	12.4	4	16.4
St. Louis, Mo.	10.7	3	13.7
Kansas City, Mo.	11.2	*4	15.2
Fargo, N. D.	14.1	4	18.1
Huron, S. D.	13.3	5	18.3
Wichita, Kans.	10.1	4	14.1

*Includes 1c city tax.

S. O. LOUISIANA

Little Rock, Ark.	18	7	25
New Orleans, La.	17	*7	24
Shreveport, La.	17	6	23
Chattanooga, Tenn.	20	8	28
Memphis, Tenn.	18	8	26

Dealer and commercial consumer discount: 2c off posted retail t.w.

*Includes 1c parish tax.

MAGNOLIA PETROLEUM

Dallas, Tex.	10	5	15

CONTINENTAL OIL CO.

Denver, Colo.	12	5	17
Cheyenne, Wyo.	13	5	18
Helena, Mont.	17	6	23
Salt Lake City, Utah.	14	5	19
Albuquerque, N. M.	13	6	19
Boise, Ida.	16.5	6	22.5

S. O. CALIFORNIA

	T.W.	Tax	Total T.W.
Phoenix, Ariz.	14.5	6	20.5
Los Angeles, Cal.	13	4	17
San Francisco, Cal.	14	4	18
Reno, Nev.	16.5	5	21.5
Portland, Ore.	15	5	20
Seattle, Wash.	15	6	21
Spokane, Wash.	18	6	24

Note: Above prices are in tank trucks or iron barrels. For deliveries direct into airplane fuel tanks, 3c per gal. additional.

Naphtha Prices

Prices in Effect June 12, 1933

	Oleum Spirits	V.M.&P. Naphtha	Cleaner Naphtha
Chicago	11.7	13.7	13
Detroit	15.4	16	16.5
Kansas City	†13	†14.5	†15.3
Milwaukee	*17.5	*19	*19.8
Minneapolis	**17.8	**19.3	**20.1
St. Louis	12.7	14.2	15
New York	...	12	15
Boston	...	16	16
Philadelphia	...	15	..

*Includes 4c state tax. †Includes 1c city tax.
**Includes 3c state tax.

Petroleum Spirits (Solvent)

Tank Cars (F.o.b. refinery or seaboard terminal)	
New York Harbor	8.50
Philadelphia district	8.50
Providence	8.50
Tank Wagon or Steel Barrels	
New York City	12
Syracuse	15
Rochester	14
Buffalo (net price)	13
Providence	16
Boston	16
Bridgeport	16
Newark	12
Philadelphia	12
Lancaster	17
Altoona	17
Baltimore	*14

Note: 2c off above t.w. prices to large buyers in some instances. *4c discount allowed on 200 gal. or more in Baltimore only, with 1c premium for steel barrels.

Fuel Oil

Following are tank wagon prices of various grades of fuel oil at the points shown in various territories. Prices are in cents per gallon:

Prices in Effect June 12, 1933

	No. 1	No. 2	No. 3	No. 4
S. O. New Jersey				
Newark, N. J.	8	6.5	....	6
Atlantic City, N. J.	8	6.5	....	6
Baltimore, Md.	8	6.50	....	5
Washington, D. C.	8.25	6.75	....	6.25
S. O. New York				
New York City	7.5	6.5	6.5	5.5
Albany, N. Y.	7.5	6.5	6.5	5.5
Rochester, N. Y.	7.5	6.5	6.5	5.5
Boston, Mass.	7.5	6.5	6.5	5.5
Augusta, Me.	8	6.5	6.5	5.5
Manchester, N. H.	8	6.5	6.5	5.5
Burlington, Vt.	7.5	6.5	6.5	5.5
New Haven, Conn.	7.5	6.5	6.5	5.5
Providence, R. I.	7.5	6.5	6.5	5.5
Atlantic Refining				
Philadelphia, Pa.	7.5	6	6	5.5
Allentown, Pa.	8.5	7	7	....
Wilmington, Del.	8	6.5	6	....
Springfield, Mass.	7.5	6.5	6.5	....
Worcester, Mass.	7.5	6.5	6.5	....
Hartford, Conn.	7.5	6.5	6.5	....
S. O. Ohio				
Cleveland	7.5	6.5	6	....
Columbus	7.5	6.75	6.25	....
Cincinnati	7.5	6.75	6.25	....
Toledo	7.5	6.75	6.25	....

Note: S. O. Ohio prices are for hose dumps; bucket dumps are 0.5c per gallon higher.

S. O. Indiana

Stanolex Fuel Oil No. 1

Chicago, Ill.	7.25
Indianapolis, Ind.	*11.7
Detroit, Mich.	8
Madison, Wis.	7.4
Minneapolis, Minn.	7.9
Sioux City, Ia.	8.6
St. Louis, Mo.	6.2
Kansas City, Mo.	6.7

*Includes state tax of 4c.

Discounts: at Chicago, Indianapolis and Detroit, 2c off t.w. price for deliveries of 100 gals. and over; at other above points, 2c off t.w. price for deliveries 50 gals. and over.

Bar, Shore Dinner, Golf For N. Y. Oil Men

NEW YORK, June 13.—Details of the annual outing and golf tournament of the Oil Trades Association of New York are being mailed members by Albert J. Squier, president, and J. Walter Saybolt, chairman of the entertainment committee.

The outing will be June 22 at the New York Athletic Club, Travers Island, N. Y., with the golfers going to the Pelham Country Club, Pelham Manor, N. Y., through the courtesy of Clifford T. Weihman, a director and former president of the association.

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Compilation Of Mid-Continent Refinery Operations

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Mid-Continent Refinery Operations, Week Ended June 9 (By Teletype)

	Kansas	Oklahoma	North & Cent. Texas	West Texas	North La.-Ark.	Total Week Ended June 9
Plants Operating.....	10	23	23	10	10	76
Da. Av. Cap. Bbls....	94,000	162,500	107,400	71,500	60,700	496,100
Da. Cracking Capacity	53,200	64,600	23,100	26,250	31,700	198,850
Da. Av. Crude Runs..	66,991 + 10.2	70,625 — 5.1	43,991 + 11.3	10,936 — 4.3	24,957 — 25.7	217,500 + 1.0
Da. Av. Other Oil....	8,892 +109.2	4,356 — 42.0	1,609 — 36.9	....	18,881 + 11.7	33,738 + 6.9
GASOLINE—Gallons						
Stocks, June 2.....	29,253,000	45,744,000	28,658,000	5,419,000	8,250,000	117,324,000
Prod. 6-2 to 6-9.....	11,627,000 + 12.5	12,827,000 + 7.7	6,747,000 — 4.8	1,156,000 — 22.7	4,916,000 — 0.4	37,273,000 + 4.5
Ship. 6-2 to 6-9.....	14,753,000 + 42.4	11,577,000 — 11.4	8,132,000 + 4.6	1,762,000 + 51.5	5,731,000 + 13.4	41,955,000 +12.1
Stocks, June 9.....	26,127,000 — 10.7	46,994,000 + 2.7	27,273,000 — 4.8	4,813,000 — 11.2	7,435,000 — 9.9	112,642,000 — 4.0
Ratio Sales to Prod...	126.9%	90.3%	120.5%	152.4%	116.6%	112.6%
KEROSINE—Gallons						
Stocks, June 2.....	7,656,000	4,749,000	1,127,000	....	771,000	14,303,000
Prod. 6-2 to 6-9.....	2,285,000 + 0.2	1,560,000 + 14.9	476,000 + 33.3	....	316,000 — 20.6	4,637,000 + 5.5
Ship. 6-2 to 6-9.....	1,948,000 + 41.1	1,554,000 + 47.6	409,000 + 21.7	....	470,000 + 58.7	4,381,000 + 42.9
Stocks, June 9.....	7,993,000 + 4.4	4,755,000 + 0.1	1,194,000 + 5.9	....	617,000 — 20.0	14,559,000 + 1.8
Ratio Sales to Prod...	85.3%	99.6%	85.9%	.....	148.7%	94.5%
FURNACE OIL—Gallons						
Stocks, June 2.....	956,000	2,861,000	221,000	.....	24,000	3,882,000
Prod. 6-2 to 6-9.....	222,000 + 86.5	705,000 + 4.2	51,000 — 26.1	....	86,000 + 62.3	1,064,000 + 15.9
Ship. 6-2 to 6-9.....	143,000 — 58.3	79,000 — 48.0	....	....	52,000 — 37.3	274,000 — 55.3
Stocks, June 9.....	1,035,000 + 8.2	3,307,000 + 23.4	272,000 + 23.1	....	58,000 +141.6	4,672,000 + 20.3
Ratio Sales to Prod...	64.4%	11.2%	.....	.....	60.4%	15.8%
GAS OIL—Gallons						
Stocks, June 2.....	3,537,000	19,499,000	8,490,000	1,159,000	5,736,000	38,421,000
Prod. 6-2 to 6-9.....	1,694,000 +155.1	513,000 — 47.6	19,000 — 97.4	118,000 — 36.6	2,305,000 — 6.7	4,649,000 — 7.7
Ship. 6-2 to 6-9.....	363,000 + 0.02	558,000 — 69.6	22,000 — 76.6	91,000	2,629,000 + 23.6	3,663,000 — 17.1
Stocks, June 9.....	4,868,000 + 37.6	19,454,000 — 0.2	8,487,000 — 0.04	1,186,000 + 2.3	5,312,000 — 5.7	39,307,000 + 2.3
Ratio Sales to Prod...	21.4%	108.8%	115.8%	77.1%	114.1%	78.8%
FUEL OIL—Gallons						
Stocks, June 2.....	15,441,000	46,343,000	61,568,000	12,189,000	12,786,000	148,327,000
Prod. 6-2 to 6-9.....	3,925,000 — 22.2	3,823,000 + 1.4	4,512,000 + 28.2	2,522,000 + 39.8	3,323,000 + 20.9	18,105,000 + 7.2
Ship. 6-2 to 6-9.....	3,824,000 + 32.0	6,211,000 + 48.2	4,268,000 + 2.8	3,514,000 + 65.9	2,238,000 — 37.7	20,055,000 +18.3
Stocks, June 9.....	15,542,000 + 0.7	43,955,000 — 5.2	61,812,000 + 0.4	11,197,000 — 8.1	13,871,000 + 8.5	146,377,000 — 1.3
Ratio Sales to Prod...	97.4%	162.5%	94.6%	139.3%	67.3%	110.8%

Gasoline Produced by Various Methods, Week Ended June 9

	Kansas	% of Total	Oklahoma	% of Total	North & Cent. Texas	% of Total	West Texas	% of Total	Louisiana-Arkansas	% of Total	Total	% of Total
Straight Run.....	5,611,000	48.3	6,782,000	52.9	3,246,000	48.1	893,000	77.2	1,950,000	39.7	18,482,000	49.6
Cracked.....	5,157,000	44.4	4,597,000	35.8	2,674,000	39.6	236,000	20.4	2,648,000	53.9	15,312,000	41.1
Natural.....	859,000	7.2	1,448,000	11.3	827,000	12.3	27,000	2.4	318,000	6.4	3,479,000	9.3
Total.....	11,627,000		12,827,000		6,747,000		1,156,000		4,916,000		37,273,000	

+ or — columns are % change over previous week.

Gasoline Stocks Reduced As Shipments Gain 4,500,000 Gallons

Staff Special—By Teletype
TULSA, June 12

MID-CONTINENT refiners took 4,600,000 gallons of gasoline from inventories week ended June 9, with Oklahoma the only district reporting an increase in stocks. This reflects a local situation of the past several days when several Oklahoma refiners have been active in the market, buying gasoline in other areas.

Gasoline production gained 1,600,000 gallons, as crude runs were up 2200 barrels daily average, and other oil charges were up a like amount. Gasoline shipments increased 4,500,000 gallons.

Kerosine production gained slightly and shipments were up 1,300,000 gallons, but stocks rose 200,000 gallons.

Furnace oil stocks gained 790,000 gallons.

Production of gas oil declined 337,000 gallons, and shipments declined 756,000 gallons, adding 886,000 gallons to stocks.

Summary for the Month

Production and shipments, all reporting refineries, for four weeks ended June 9. Change in stocks figured from May 12.

GASOLINE

	Gallons
Production	150,424,000
Shipments	156,844,000
Net change in stocks	—6,420,000
Ratio sales to production	104.2%

KEROSINE

Production	20,344,000
Shipments	17,315,000
Net change in stocks	+3,029,000
Ratio sales to production	85.1%

FURNACE OIL

Production	4,123,000
Shipments	3,267,000
Net change in stocks	+856,000
Ratio sales to production	79.2%

GAS OIL

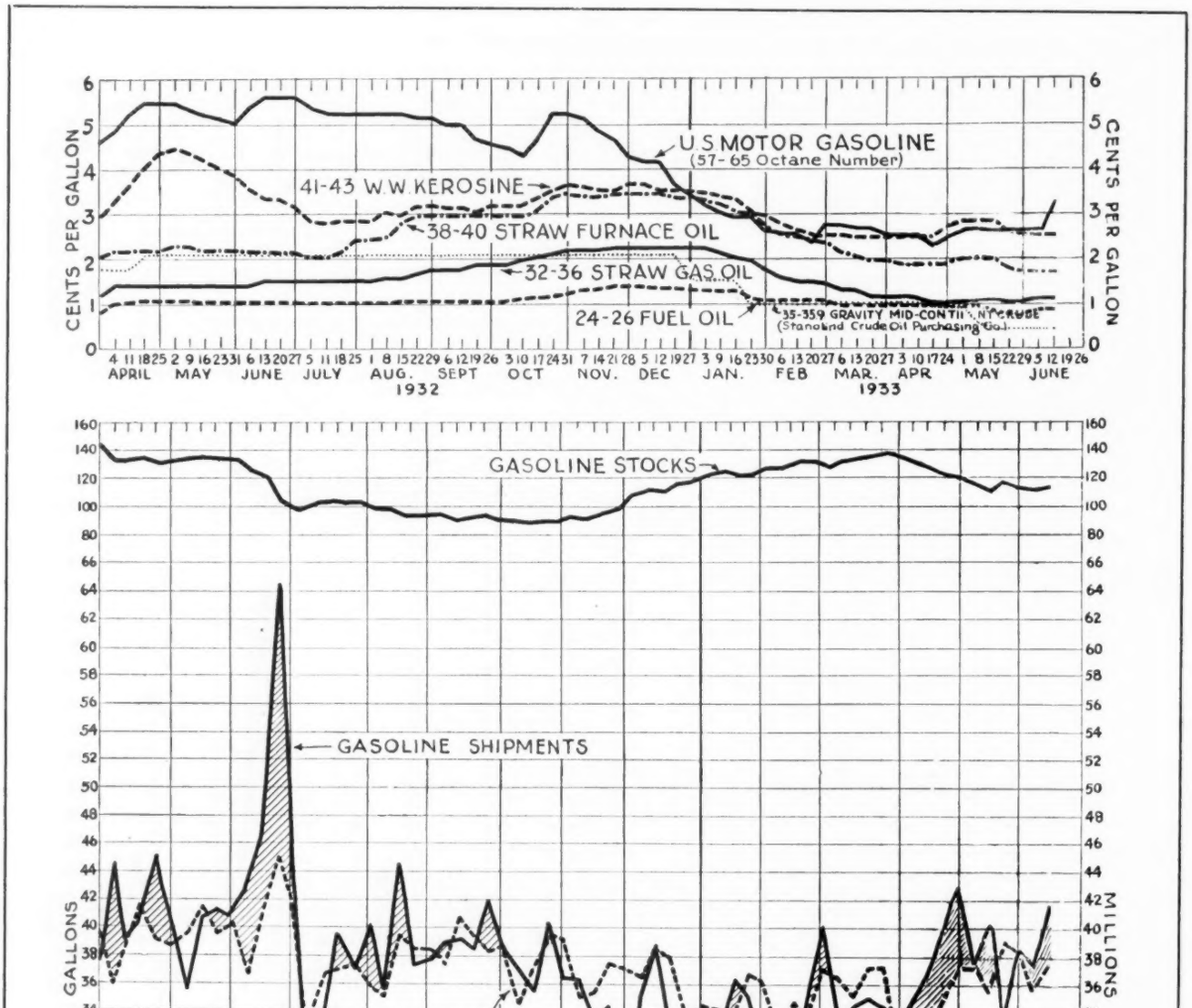
Production	15,788,000
Shipments	15,219,000
Net change in stocks	+569,000
Ratio sales to production	96.3%

FUEL OIL

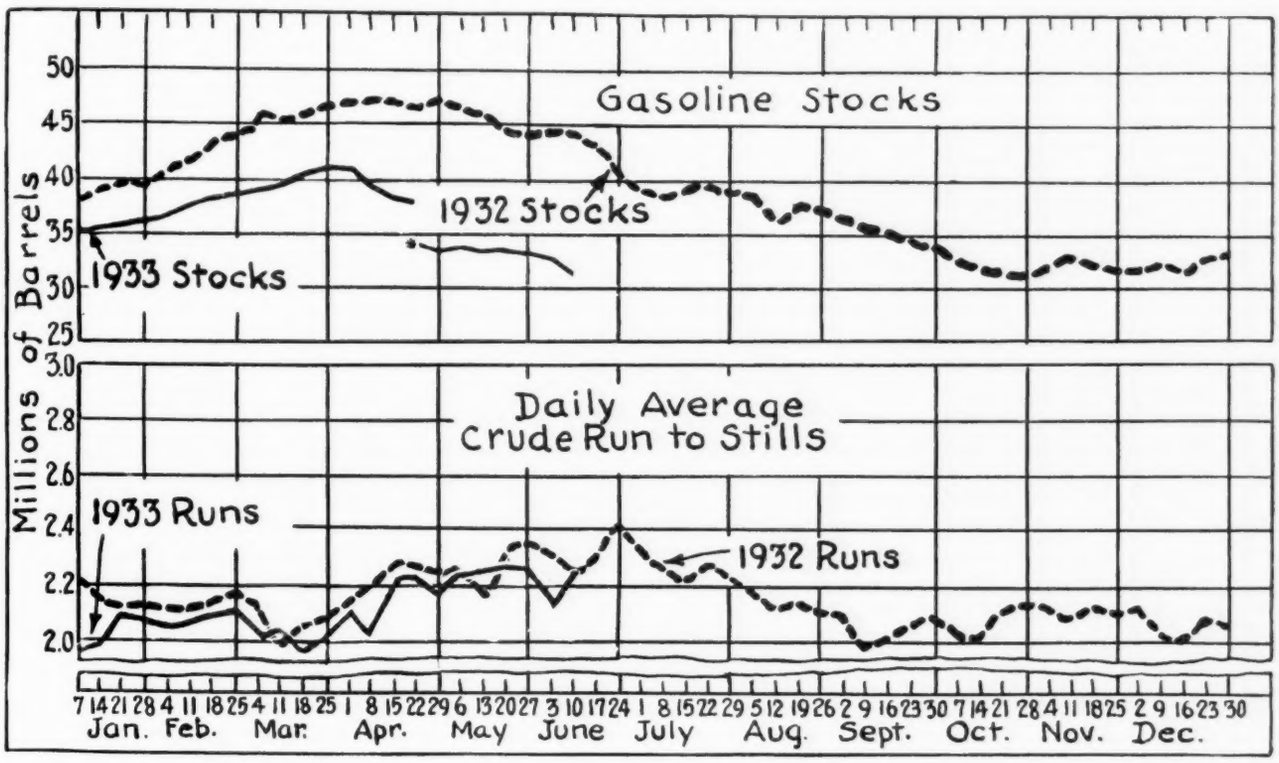
Production	72,784,000
Shipments	71,312,000
Net change in stocks	+1,472,000
Ratio sales to production	98.0%

Barometer of Mid-Continent Refinery Market—Week Ending June 9

Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 76 Plants to National Petroleum News



U. S. Crude Runs and Gasoline Stocks as Reported Weekly by A. P. I.



*Method of reporting changed.

Bulk Motor Fuel Stocks Drop 1,500,000 Barrels

By Telegraph

NEW YORK, June 13

BULK stocks of motor fuel were reduced 1,500,000 barrels in the week ended June 10, according to reports gathered by the American Petroleum Institute. Total stocks of reporting companies that date were 54,647,000 barrels, as compared with 56,147,000 barrels on June 3.

The large reduction in motor fuel stocks was made in spite of an increase in crude runs to stills of 66,000 barrels daily average and an increase of 6000 barrels in daily production of cracked gasoline. Much of the increase in demand no doubt may be attributed to the rush on the part of jobbers to fill up their storage tanks before the new federal gasoline tax went into effect.

Refinery gasoline stocks were reduced 811,000 barrels during the week to 31,076,000 barrels. Every refining group except California drew on inventories. In that state refiners increased their runs of crude to stills 21,000 barrels daily average, increased their production of cracked gasoline 2000 barrels daily average and as a result were forced to pump 111,000 barrels of gasoline into their already heavy storage.

Indiana-Illinois refiners reduced their gasoline stocks 305,000 barrels, Oklahoma-Kansas refiners 143,000 barrels and East Coast refiners 130,000 barrels.

Fuel oil stocks increased only 24,000 barrels during the week to 125,070,000 barrels.

Current Refinery Operations

Districts	Per Cent Capacity Reporting	Daily Average Crude to Stills (Barrels) Week Ended		Per Cent of Reporting Capacity Operated Week Ended		Stocks (Thousands of Barrels) Gasoline		Gas & Fuel Oil		% of Total Capacity Reporting	Gasoline Production Daily Av. Production (Barrels) Week Ended	
		June 10	June 3	June 10	June 3	June 10	June 3	June 10	June 3		June 10	June 3
East Coast	99.1	472,000	446,000	73.9	69.8	5,884	6,014	6,854	6,897	94.8	75,000	84,000
Appalachian	95.0	81,000	81,000	60.0	60.0	1,322	1,401	880	820	97.5	24,000	21,000
Ind., Ill., Ky.	97.5	310,000	310,000	73.1	73.1	5,148	5,453	3,970	3,987	95.1	103,000	108,000
Okla., Kans., Mo.	84.9	234,000	223,000	60.0	57.2	3,141	3,284	3,333	3,265	92.5	56,000	55,000
Inland Texas	56.4	90,000	78,000	50.6	43.9	1,175	1,237	2,228	2,243	81.1	21,000	18,000
Texas Gulf	97.7	426,000	433,000	78.6	79.9	5,066	5,126	6,466	6,125	97.8	101,000	90,000
La. Gulf	97.3	112,000	109,000	78.9	76.8	1,129	1,196	1,877	2,044	100.0	20,000	19,000
No. La., Ark.	88.5	32,000	38,000	40.5	48.1	174	204	606	564	86.4	8,000	9,000
Rocky Mt.	90.8	42,000	36,000	30.4	26.1	1,177	1,216	677	685	95.4	10,000	10,000
Calif.	94.6	454,000	433,000	52.4	50.0	6,860	6,749*	98,179	98,415	100.0	55,000	53,000
Total	91.6	2,253,000	2,187,000	63.8	61.9	31,076	31,887*	125,070	125,046	95.4	473,000	467,000

*Revised.

Complete Seaboard Markets

Prices on this page do not include federal tax levied on some products

Eastern Domestic Markets

(Prices for tank car lots, f. o. b. refinery or seaboard terminal, representing majority of sales and quotations to jobbers and/or consumers. Florida and S. Carolina inspection tax not included.

	Prices June 12	Prices June 5	Prices May 29
U. S. MOTOR GASOLINE: Below 65 Octane Number			
New York harbor	4.75 – 5.00	4.50 – 4.75	4.50
Portland district	5.00 – 5.25	5.00 – 5.25	4.75
Boston district	4.75 – 5.00	4.75 – 5.00	4.65 – 4.75
Providence district	4.75 – 5.00	4.75 – 5.00	4.60 – 4.75
Philadelphia district	4.75 – 5.00	4.50 – 4.75	4.25 – 4.50
Baltimore district	4.75	4.50	4.25 – 4.50
Norfolk district	4.75 – 5.00	4.75	4.25 – 4.50
Charleston district	4.75 – 5.00	4.75 – 5.00	4.50
Savannah district	4.75 – 5.00	4.75 – 5.00	4.50
Jacksonville district	4.75 – 5.00	4.75 – 5.00	4.50
MOTOR GASOLINE: 65 Octane Number and Above			
New York harbor	5.00 – 5.25	4.75 – 5.00	4.75
Portland district	5.25 – 5.50	5.25 – 5.50	5.00
Boston district	5.00 – 5.25	5.00 – 5.25	4.75 – 5.00
Providence district	5.00 – 5.25	5.00 – 5.25	4.75 – 5.00
Philadelphia district	5.00 – 5.25	4.75 – 5.00	4.50 – 4.75
Baltimore district	5.00	4.75	4.50 – 4.75
Norfolk district	5.00 – 5.25	4.75 – 5.00	4.50 – 4.75
Charleston district	5.00 – 5.25	4.75 – 5.00	4.75
Savannah district	5.00 – 5.25	4.75 – 5.00	4.75
Jacksonville district	5.00 – 5.25	4.75 – 5.00	4.75
AVIATION GASOLINE: Below 73 Octane Number			
New York harbor	8.50 – 9.50	8.50 – 9.50	8.50 – 9.50
Philadelphia	8.50 – 9.50	8.50 – 9.50	8.50 – 9.50
Baltimore	8.50 – 9.50	8.50 – 9.50	8.50 – 9.50
Boston	8.50 – 9.50	8.50 – 9.50	8.50 – 9.50
73 Octane Number and Above (Test basis 300° F.; 600 R.P.M.)			
New York harbor	11.00 –12.00	11.00 –12.00	11.00 –12.00
Philadelphia	11.00 –12.00	11.00 –12.00	11.00 –12.00
Baltimore	11.00 –12.00	11.00 –12.00	11.00 –12.00
Boston	11.00 –12.00	11.00 –12.00	11.00 –12.00
WATER WHITE KEROSINE			
New York harbor	5.00	4.75 – 5.00	4.75 – 5.00
Philadelphia district	5.00	4.75 – 5.00	4.75 – 5.00
Baltimore district	5.00	4.75 – 5.00	4.75 – 5.00
Norfolk district	5.00	4.75 – 5.00	4.75 – 5.00
Charleston district	5.00	4.75 – 5.00	5.00
Boston district	5.00	4.75 – 5.00	4.75 – 5.00
Savannah district	5.00	4.75 – 5.00	5.00
Jacksonville district	5.00	4.75 – 5.00	5.00
Portland district	5.25	5.00 – 5.25	5.25
Providence district	5.00	4.75 – 5.00	4.75 – 5.00
BURNING OILS:			
New York harbor:			
Furnace oil No. 1	5.00	5.00	5.00
Furnace oil No. 2	4.00	4.00	4.00
Distillate oil No. 3	4.00	4.00	4.00
Industrial oil No. 4	3.50	3.50	3.50
Philadelphia district:			
Furnace oil No. 1	5.00	5.00	5.00
Furnace oil No. 2	4.00	4.00	4.00
Distillate oil No. 3	3.50	3.50	3.50
Industrial oil No. 4	3.50	3.50	3.50
Baltimore district:			
Furnace oil No. 1	5.00	5.00	5.00
Furnace oil No. 2	4.00	4.00	4.00
Distillate oil No. 3	3.50	3.50	3.50
Industrial oil No. 4	3.50	3.50	3.50
Boston district:			
Furnace oil No. 1	5.00	4.75	4.75
Furnace oil No. 2	4.00	4.00	4.00
Distillate oil No. 3	3.75	3.75	3.75
Industrial oil No. 4	3.50	3.50	3.50

	Prices June 12		
	*Bunker Oil Grade C	Diesel Oil Ships' Bunkers	Gas Oil 28-34 Gravity
New York Harbor	$0.75	†$1.65	4.00
Philadelphia district	0.75	1.65	4.00
Baltimore district	0.75	1.65	4.00
Norfolk district	0.75	1.65	....
Charleston district	0.70	1.65	....
Savannah district	0.70	†1.65	....
Jacksonville district	0.70	†1.65	....
Portland district	0.80	1.75	....
Boston district	0.75	1.65	....
Providence district	0.75	1.65	....

*Lighterage 5c per bbl. additional. †At shore plants, 4c per gal.

New York Export Markets

(Prices in cents per gallon in barrels, F. a. s. New York)

CYLINDER OILS (Pennsylvania Products)	June 12	June 5	May 29
Bright stock, No. 8 color	26.00 –27.00	26.00 –27.00	26.00
Bright stock, No. 6½ color diluted	25.00 –26.00	25.00 –26.00	25.00
600 Warren E filtered	20.00 –21.00	20.00 –21.00	21.00
600 stm. refd, unfiltered	17.00 –17.50	17.00 –17.50	16.50 –16.75
650 stm. refd. unfiltered	19.25 –19.75	19.25 –19.75	18.75 –19.00
600 flash steam refined	20.25 –20.50	20.25 –20.50	19.75 –20.00
650 flash, steam refined	25.75 –26.00	25.75 –26.00	25.50 –25.75

Wax Market

(Prices in cents per pound. Tests made by A. S. T. M. method with melting points converted into A. M. P. by adding 3° F. Export prices are f.a.s. carload lots. Domestic prices are f.o.b. refineries in New York and New Orleans harbor district, in bags, carload lots, with 0.2c discount allowed for shipment in bulk).

	Prices June 12	
NEW YORK	Domestic	Export
124-126 Yellow Crude scale	2.25	2.25
122-124 White Crude scale	2.375	2.375
124-126 White Crude scale	2.50	2.50
123-125 Fully refined	3.20	2.875– 3.00
125-127 Fully refined	3.30	3.00 – 3.125
128-130 Fully refined	3.55	3.25 – 3.50
130-132 Fully refined	3.70	3.375– 3.625
133-135 Fully refined	4.30	4.00 – 4.375
135-137 Fully refined	4.55	4.25 – 4.50

	Prices June 12	
NEW ORLEANS	Domestic	Export
124-126 Yellow Crude scale	2.25	2.25
122-124 White Crude scale	2.375	2.375
124-126 White Crude scale	2.50	2.50
123-125 Fully refined	3.20	2.75 – 3.00
125-127 Fully refined	3.30	3.00 – 3.125
128-130 Fully refined	3.55	3.25 – 3.50
130-132 Fully refined	3.70	3.375– 3.625
133-135 Fully refined	4.30	4.00 – 4.375

Gulf Coast Bulk Market

(Prices are f. o. b. Gulf oil terminals representing sellers' opinions except prices specified to the contrary. Prices cover bulk shipments of 20,000 barrels or more, unless otherwise noted.)

	June 12	June 5	May 29
U. S. MOTOR GASOLINE: For Domestic Shipment			
Below 65 octane number	3.75 – 4.00	3.50 – 3.75	3.125– 3.25
65 octane and above	4.00 – 4.25	4.00 – 4.25	3.50 – 3.75
FURNACE OILS			
No. 1 Furnace oil	3.875– 4.00	3.625– 3.75	3.625– 3.75
No. 2 Furnace oil	3.00 – 3.125	2.75 – 3.00	2.75 – 3.00
KEROSINE			
41-43 w.w.	3.875– 4.00	3.625	3.625
For Export Shipment			
GASOLINE			
U. S. Motor gasoline	3.375– 3.50	3.00 – 3.125	3.00 – 3.125
60-62, 400 e.p. gasoline	3.50 – 3.625	3.125– 3.25	3.125– 3.25
61-63, 390 e.p. gasoline	3.625– 3.75	3.25 – 3.375	3.25 – 3.375
64-66, 375 e.p. gasoline	3.75 – 4.00	3.375– 3.50	3.25 – 3.375
U. S. Motor, cases (cargoes)	$1.25	$1.25	$1.25
64-66, 375 e.p. cases (cargoes)	$1.35	$1.35	$1.35
KEROSINE			
44 water white	3.75	3.75	3.75
41-43 water white	3.75 – 4.00	3.625	3.625
41-43 prime white	3.625– 3.875	3.50	3.50
W.W., cases (cargoes)	$1.20	$1.20	$1.20
P.W., cases (cargoes)	$1.15	$1.15	$1.15
For Domestic and/or Export Shipment			
GAS and BUNKER OILS			
*26-30 translucent gas oil	2.875– 3.00	2.75 – 3.00	2.75 – 3.00
*30 plus translucent gas oil	3.00 – 3.25	3.00 – 3.25	3.00 – 3.25
Diesel Oil ships' bunkers	$1.50	$1.50	$1.50
Grade C bunker oil, for ships' bunkers, per bbl.	$0.60	$0.60	$0.60
Grade C bunker oil, per bbl. in cargoes	$0.55 –$0.60	$0.55 –$0.60	$0.55 –$0.60

*Less than ½ of 1% sulphur.

MEXICAN CRUDE AND BUNKER OILS (f.o.b. Steamer, Tampico)			
Heavy Panuco crude taxes to be paid, per bbl.	$0.40 –$0.43	$0.40 –$0.43	$0.40 –$0.43
Grade C for bunkering, taxes paid, per bbl.	$0.60	$0.60	$0.60
SOUTH TEXAS LUBRICATING OILS (Viscosity at 100° F. cold test 0 Tanker, f. o. b. Gulf oil terminals.)			
200 vis. No. 3 unfilt. pale	4.75 – 5.00	4.75 – 5.00	4.75 – 5.00
300 vis. No. 3 unfilt. pale	5.375– 6.00	5.375– 6.00	5.375– 6.00
500 vis. No. 3½ unfilt. pale	6.25 – 7.00	6.25 – 7.00	6.25 – 7.00
750 vis. No. 4 unfilt. pale	7.25 – 7.75	7.25 – 7.75	7.25 – 7.75
1200 vis. No. 4 unfilt. pale	8.50 – 9.00	8.50 – 9.00	8.50 – 9.00
200 vis. No. 5-6 red oil	4.50 – 5.00	4.50 – 5.00	4.50 – 5.00
300 vis. No. 5-6 red oil	5.00 – 5.50	5.00 – 5.50	5.00 – 5.50
500 vis. No. 5-6 red oil	5.75 – 6.00	5.75 – 6.00	5.75 – 6.00
750 vis. No. 5-6 red oil	6.75 – 7.125	6.75 – 7.125	6.75 – 7.125
1200 vis. No. 5-6 red oil	7.75 – 8.25	7.75 – 8.25	7.75 – 8.25

Note: Red oil prices shown above cover oils with blue cast; one or two refiners ask 0.5c to 1c per gal. higher for green cast red oils.

Pacific Export Market

(Quotations are at seaboard, Los Angeles, in cargo lots, cents per gallon, except where otherwise noted.)

53-55 U. S. Motor	3.50 – 4.00	3.50 – 4.00	3.50 – 4.00
400 e.p. blend 65 Octane and above	3.75 – 4.50	3.75 – 4.50	4.00 – 4.50
Gas oil, 30-34 per bbl.	$0.85 –$0.90	$0.85 –$0.90	$0.85 –$0.95
Diesel oil, 27 plus, per bbl.	$0.85 –$0.90	$0.85 –$0.90	$0.85 –$0.90
Bunker oil, 14-18 per bbl.	$0.55 –$0.67	$0.55 –$0.67	$0.60 –$0.72
Fuel oil, 14-18 per bbl.	$0.47 –$0.60	$0.47 –$0.60	$0.50 –$0.60
38-40 w.w. kero., 150 fire	3.75 – 4.25	3.75 – 4.25	3.75 – 4.25
Cased Goods			
Gasoline, U. S. Motor	$1.45 –$1.60	$1.45 –$1.60	$1.45 –$1.60
Gasoline, 400 e.p. blend	$1.55 –$1.70	$1.55 –$1.70	$1.55 –$1.70
38-40 w.w. kero., 150 fire	$1.25 –$1.35	$1.25 –$1.35	$1.25 –$1.35
Kerosine, prime white	$1.05 –$1.20	$1.05 –$1.20	$1.05 –$1.20

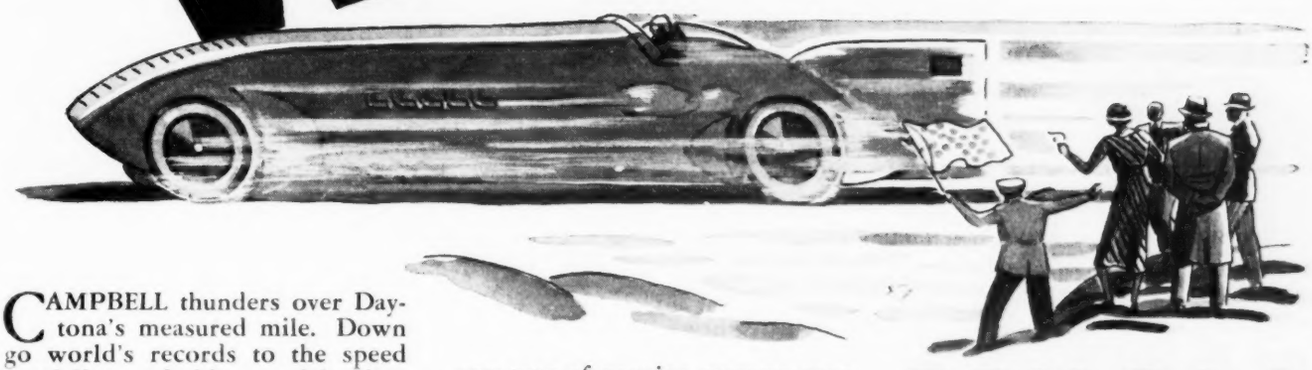
Tanker Rates

(Approximate tanker freight rates to Continental ports, in shillings per ton of 2240 pounds, British sterling; to U. S. ports, cents per barrel)

	June 12			
	Crude & /or Fuel		Refined Oil & /or Spirits	
	Last Paid	Owners Ask	Last Paid	Owners Ask
Calif.-U.K./Continent*	12/6	15/-20/	15/	15/-19/
Gulf-U.K./Continent*	9/	9/	8/9	9/-10/
Calif.-N. Atlantic (not E. of N. Y.)	42c	40-45c	41c	40-45c
Gulf-N. Atlantic** (not E. of N. Y.)	14	14-16c	14c	15-18c

*Continental ports in range between Bordeaux and Hamburg, both inclusive
**Venezuela loading same rate; Tampico 2 to 3c per bbl additional.

AGAIN...THE SPECIALIST WINS



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A new gear is born which defies lubrication with any gear oil known. It is a better gear—transmits power more effectively—allows cars to be built with a lower center of gravity.

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A superior lubricant for all types of gears

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An insoluble lubricant for water pumps

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For grease cup application on farm and mill machinery

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PENOLA

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"Q" GASOLINES", say the U. S. Public Health Regulations, "should not only *be* colored—but *stay colored.*"

For this reason many gasoline dyes are not suitable for use with the new "Q" compound—especially when such gasolines are exposed to light.

As pioneers in the field of coloring petroleum products, we proved years ago that our dyes would remain stable in gasoline. But we did not offer them for coloring "Q" Gasolines until *exhaustive tests proved* our Anthraquinone Dyes *non-fading* in the presence of tetra ethyl lead!

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Now these dyes are being supplied to many "Q" Gasoline marketers in such shades as green, violet and blue—as well as gold and copper. All are completely soluble in gasoline. All are stable in light, storage, acid, and alkali.

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PATENT CHEMICALS, INC.
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PIONEERS IN GASOLINE COLORS
ANTHRAQUINONE DYES

MR. REFINER

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Is there a sales-message for them from you in the advertising pages?

Refiners' & Compounders' Supplies

Following are average market prices for materials used by refiners and compounders effective on the date shown.

		June 12	June 5
Refiners' Supplies			
Soda Ash light 58% bags, cwt.		$1.125-1.38	$1.125-1.38
Silicate of Soda 60 deg. drums	cwt.	$1.75-1.90	$1.75-1.90
Silicate of Soda 40 deg. drums	cwt.	$0.70-1.00	$0.70-1.00
Sal Soda wks.		$0.90-1.00	$0.90-1.00
Caustic Soda 76% solid.	cwt.	$2.55	$2.55
Sulfuric Acid 60 deg. tank cars, f.o.b. shipping point	per ton	$11.00-12.50	$11.00-12.50
Sulfur, flowers of	cwt.	$3.10-4.05	$3.10-4.05
Liquid Chlorine, tank cars, wks.	lb.	1.75	1.75
Compounder's Supplies			
Vegetable Oils			
Linseed carloads, spot	lb.	9.00	9.00
Tanks, spot		8.40	8.40
Soya Bean, Tank, coast	lb.	4.70–5.00	4.70–5.00
Oleic Acid			
Distilled, tanks	lb.	5.75	5.75
Distilled, bbls.	lb.	6.625	6.625
Saponified, tanks	lb.	6.75	6.75
Saponified, bbls.	lb.	6.00	6.00
Lard Oils			
Prime Winter Strained	lb.	10.00	9.50
Extra Winter Strained	lb.	8.50	8.00
Extra No. 1	lb.	7.75	7.25
No. 1	lb.	7.50	7.00
No. 2	lb.	7.25	6.75
Tallow oil	lb.	8.00	7.50
Neatsfoot Oil			
Pure, bbls.	lb.	14.25	13.75
Extra, bbls.	lb.	8.00	7.50
No. 1 bbls.	lb.	7.75	7.25
Cold Pressed	lb.	16.75	16.25
Naval Stores			
Steam distilled turpentine, N. Y.	gal.	45.50-46.00	46.50-47.00
Steam, distilled turpentine, Savannah	gal.	40.00	41.25
Gum turpentine, N. Y.	gal.	48.50	48.50
Gum turpentine, f.o.b. cars Savannah	gal.	41.00	41.00
Wood Rosin, N. Y.	bbl.	$4.13	$4.33
Wood Rosin F, Savn'h	bbl.	$3.30	$3.45
Gum Rosin B, N. Y.	bbl.	$4.15	$4.25
Gum Rosin B, f.o.b. cars Savannah	bbl.	$2.90	$2.95
Rosin oil, pure	gal.	40–42	40–42
Rosin oil, compounded	gal.	41–43	41–43
Pine Tar			
Kiln burnt		$8.00-9.00	$8.00-9.00
Retort	bbl.	$9.50-10.00	$9.50-10.00
Alcohol			
Denatured Formula 5, per gal., in bbls., car lots		39.6	39.6

Fatalities Lower in California

WASHINGTON, June 12.—Fatalities in the California petroleum industry were reduced 20 per cent in 1932 to the lowest level in the past 10 years according to a report issued by R. L. Mareck of the U. S. Bureau of Mines (R. I. 3208). Twenty-four men were killed as compared with 30 in 1931, 50 in 1930 and 63 in 1929.

Automobiles accounted for seven of the deaths, four of these being in the marketing department. Drilling and producing division deaths totaled 12, pipeline and transportation two, refiners and gasoline plants four and marketing six. Analyses of the accidents are given in the paper.

Crude Oil Prices (in Effect June 12, 1933)

Crude prices for the whole year in OIL PRICE HANDBOOK published annually

(Prices are per barrel at the well; A. P. I. Gravity)

EASTERN FIELDS

(Posted by Joseph Seep Purchasing Agency)

(Effective May 22, 1933 except Corning May 8)

Penna. Grade Oil in Southwest Penna. Pipe Lines.....$1.07

Penna. Grade O in Eureka Pipe Lines (West Virginia).....$1.02

Penna. Grade Oil in Buckeye Pipe Lines (Macksburg, O.).....†$0.90

Corning Oil in Buckeye Pipe Lines (Ohio)..$0.50

†For Macksburg oil run previous to March 1, 1932, $0.85, effective May 22, 1933.

Posted by Other Companies

Tide Water Pipe Co., Ltd.:

Bradford-Alleghany district (Penna. and N. Y.) (Effective May 22, 1933).....$1.37

*The Pennzoil Co.: (Effective May 22, 1933)

Penna. Grade Oil in National Transit Lines*$1.32

Ashland Oil & Transportation Co.: (Effective May 9, 1933)

Somerset Oil in Ashland Lines (Kentucky) †$0.35

†Buyers pay 15c premium for Somerset crude.

*The Pennzoil Co. posts $1.32 in Cochran, Franklin, Hamilton and Doolittle, Pa. fields; prices in other districts range down to $1.27 per bbl. at wells.

MICHIGAN

(Posted by Pure Oil Co.)

Midland, Midland County (May 6, 1933)..$0.75

CENTRAL STATES FIELDS

Posted by Ohio Oil Co.

(Effective May 9, 1933)

Wooster (May 8).$0.50	Princeton.....$0.47
Lima..... 0.55	Illinois..... 0.47
Indiana..... 0.25	West Kentucky. 0.42

CANADIAN CRUDE

Posted by Imperial Oil Refineries, Ltd.

Western Ontario

(Effective Jan. 18, 1933)

Petrolia.....$1.75

Oil Springs.....$1.82

Alberta

Turner Valley

(Effective Jan. 24, 1933)

40-44.9.....$1.41	Naphtha:
45-49.9..... 1.90	†Clear.....$2.82
50 and above.... 2.41	†Discolored..... 2.58

†Clear naphtha: 22 color; 10 lbs. vapor pressure, 90% recovery, end point, 410° A.P.I. Discolored naphtha: 90% recovery and 10 lbs. vapor pressure.

(Effective May 9, 1933)

Red Coulee.....$0.65

*MID-CONTINENT

Prices of Stanolind Crude Oil Purchasing Co.

Oklahoma, Kansas, North and North Central Texas.....$0.25

*Effective May 3 in Texas and May 6 in Oklahoma-Kansas.

Above prices as posted by Stanolind were met by the following companies on the dates mentioned:

May 2, by Humble in North Texas, Ranger, Mexia, Powell, Boggy Creek, Richland, Worthum, Currie and Moran, Tex.; also Continental Oil in N. Texas.

May 3, Shell Petroleum in Texas, and May 6, in Oklahoma-Kansas.

May 3, The Texas Co. in North and North Central Texas and Oklahoma; also Sinclair.

May 8, Magnolia in Texas.

May 8, Carter Oil, Continental Oil and Pure Oil in Oklahoma-Kansas.

Prices of Magnolia Petroleum Co.

In Oklahoma

(Effective May 9, 1933)

Below 28.....$0.20	35 and above...$0.25
28-34.9..... 0.23	

(Effective May 8, 1933)

In Texas

In North, North Central and Central Texas $0.25

PANHANDLE TEXAS

Humble Oil & Refining Co.

(Effective May 2, 1933)

Gray county.....$0.20

Carson-Hutchinson.....$0.18

Above prices met May 3 by The Texas Co., May 2 by Continental Oil, May 8 by Magnolia.

EAST TEXAS

By Humble, Magnolia, Texas Co., Sinclair and Empire.....$0.25

By Shell.....$0.10

Effective April 26 by Magnolia; May 3 by Sinclair and Shell; May 5 by Empire; May 10, by The Texas Co., and May 13 by Humble. Stanolind pays $0.25 effective May 11, 1933.

WEST TEXAS

Humble Oil & Refining Co.

(Effective May 2, 1933)

Pecos, Winkler, Crane, Upton, Crockett, Ector, Howard and Glasscock Counties.....$0.20

May 3, met by The Texas Co.; also by Shell in Howard-Glasscock, Winkler, Upton, Crane and Pecos (excepting Yates shallow pool). For Yates shallow pool in Pecos county, $0.15. May 8, met by Magnolia.

NEW MEXICO

(Effective May 2, 1933)

Lea County (Humble, *Shell and *The Co.) $0.20.

*Shell and Texas Co. on May 3.

***Posted by Continental Oil Co.**

Artesia, Jackson and Maljamar.....$0.20

Cat Creek, Mont.....$0.87

*Effective dates: Artesia, May 2; Jackson and Maljamar, May 8; Cat Creek, Dec. 16, 1932.

SOUTH and SOUTHWEST TEXAS

(Posted by Humble Oil & Refining Co.)

(Effective May 2, 1933)

Darst Creek.....$0.23	Mirando.....$0.25
Salt Flat.....$0.23	Pettus, Bee Cty.$0.35
Conroe, Montgomery county.....$0.30	

Above prices met May 3 by The Texas Co. in Darst Creek and Conroe; Texas Co. also posted $0.30 for Saxet and $0.25 in Duval county. May 3, Shell met Humble in Salt Flat. May 8, Magnolia met in Mirando and Darst Creek and posted Luling and Corsicana heavy at $0.20 and Lytton Springs at $0.25.

CALIFORNIA CRUDE

Standard Oil Co. of California

(All gravities above those quoted take highest price offered in the field)

Effective March 5, 1933

Gravity	Signal Hill	Seal Beach Alamitos Heights	Huntington Beach	Inglewood	Playa Del Rey	Olinda-Brea Canon	Athens-Rosecrans Dominguez	Elwood Terrace	Torrance	Richfield	Whittier La Habra	Montbello	Coyote Hills	Santa Fe Springs	Newhall McKittrick Kern River	Midway Sunset Elk Hills Buena Vista Hills	Lost Hills	Coalinga	Wheeler Ridge	Ventura Avenue (Associated Oil Co.)	Santa Paula (Union Oil Co.)	Orcutt (Union Oil Co.)
14-14.9	$0.55	$0.55	$0.55	$0.55	$0.55	$0.55	....	....	$0.55	$0.55	$0.55	$0.55	$0.55	....	$0.49	$0.49	$0.49	$0.49	$0.49	....	$0.55	....
15-15.9	.55	.55	.55	.55	.55	.55	....	....	.55	.55	.55	.55	.55	....	.49	.49	.49	.49	.49	....	.55	....
16-16.9	.55	.55	.55	.55	.55	.55	....	....	.55	.55	.55	.55	.55	....	.49	.49	.49	.49	.49	....	.55	$0.49
17-17.9	.55	.55	.58	.58	.58	.58	....	....	.57	.56	.57	.55	.55	....	.49	.49	.50	.49	.49	....	.55	.49
18-18.9	.57	.55	.61	.61	.60	.61	....	....	.59	.58	.59	.55	.57	....	.49	.49	.52	.49	.49	....	.55	.49
19-19.9	.59	.57	.63	.64	.62	.64	....		.61	.61	.61	.55	.59	....	.49	.49	.54	.49	.49	....	.55	.49
20-20.9	.61	.59	.64	.67	.64	.66	....		.62	.63	.63	.55	.61	....	....	.52	.56	.49	.49	....	.56	.52
21-21.9	.63	.62	.66	.69	.66	.68	....		.64	.66	.65	.55	.63	$0.57	....	.55	.58	.51	.50	....	.57	.55
22-22.9	.65	.64	.68	.71	.69	.70	....		.66	.68	.67	.57	.65	.59	....	.57	.60	.53	.52	$0.58	.58	.57
23-23.9	.67	.67	.70	.73	.71	.72	....		.68	.70	.69	.60	.67	.62	....	.60	.62	.55	.54	.60	.59	.60
24-24.9	.69	.69	.72	.75	.73	.73	$0.65		.70	.73	.71	.62	.69	.64	....	.63	.63	.57	.56	.62	.60	.63
25-25.9	.71	.72	.74	....	.75	.75	.68	F.O.B. Ship	.72	.75	....	.65	.71	.66	....	.66	.65	.59	.58	.64	.61	.66
26-26.9	.73	.74	.75	....	.77	.77	.70	....	.73	.77	....	.68	.72	.69	....	.68	.67	....	....	.66	.63	.68
27-27.9	.75	.76	.77	....		.79	.73	....	....	.80	....	....	.74	.71	....	.71	.69	....	....	.68	.65	....
28-28.9	.77	.79	.79	....		.81	.75	....	....	.82	....	....	.76	.73	....	.74	.71	....	....	.70	.67	....
29-29.9	.79	.81	.81	....		....	.78	....	....	.84	....	....	.78	.76	....	.76	.73	....	....	.72	.69	....
30-30.9	.81	.84	.83	....		....	.81	....					.80	.78	....	.79	.75	....	....	.74	.71	....
31-31.9	....	....	....	....		....	.83	....					.82	.80	....	.82	....	....	....	....	....	....
32-32.9	....	....	....	....		....	.86	....			Kettleman Hills		.84	.83	....	.85	....	....	....	....	....	....
33-33.9	....	....	....	....		....	....	$0.83	....	....	$0.66	....	.86	.85	....	.87	....	....	....	....	....	....
34-34.9	....	....	....	....		....	....	.85	....	....	.68	....	.88	.87	....	....	....	....	....	....	....	....
35-35.9	....	....	....	....		....	....	.87	....	....	.70	....	....	.90	....	....	....	....	....	....	....	....
36-36.9	....	....	....	....		....	....	.89	....	....	.72	....	....	.92	....	....	....	....	....	....	....	....
37-37.9	....	....	....	....		....	....	.91	....	....	.74	....	....	.94	....	....	....	....	....	....	....	....
38-38.9	....	....	....	....		....	....	....	....	....	.76	....	....	.96	....	....	....	....	....	....	....	....
39-39.9	....	....	....	....		....	....	....	....	....	.78	....	....	....	....	....	....	....	....	....	....	....

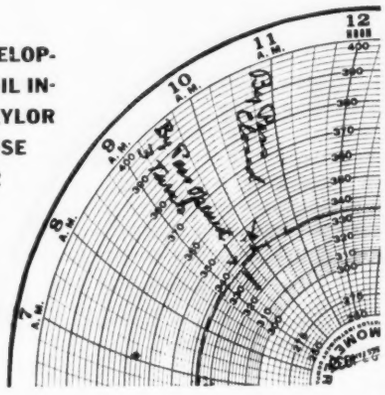
Subject to Field Gathering Charge of 5c per Bbl.

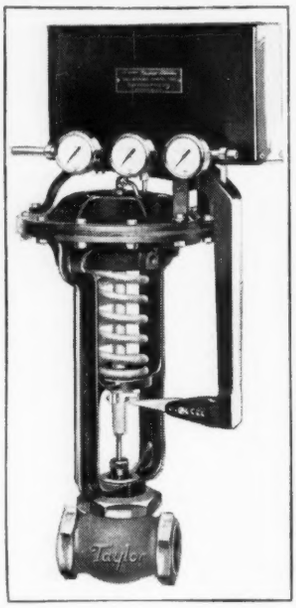
(Crude Oil Prices continued on next page)

Regardless of load changes

NOW ASSURE STRAIGHT LINE CONTROL OF TEMPERATURES

WITH A NEW DEVELOPMENT FOR THE OIL INDUSTRY—THE TAYLOR DUBL-RESPONSE REGULATOR





This chart furnishes evidence of the ability of the Taylor Dubl-Response Regulator to maintain a desired control point in spite of load change. The valve was on the reflux line to the fractionating tower of a cracking plant. The by-pass was closed and all reflux went through a 2-inch diaphragm valve. Suddenly the by-pass valve was opened three full turns, causing a 16° drop in temperature. Note how quickly the regulator brought the temperature back to the original setting point automatically. Just as suddenly the by-pass was closed. The temperature built up 6°. But again the regulator restored the setting point.

* * *

At right of chart is the Taylor Dubl-Response Control Unit in position on a Taylor Evenaction Diaphragm Valve.

● The Taylor Dubl-Response Regulator automatically maintains the desired temperature control point in spite of load changes, process time lags, and unbalanced operating conditions in stabilizers, towers or stills. It assures throttling valve action — eliminates "hunting." It automatically overcomes valve stem friction and guarantees precision valve movements. It does other things space does not permit us to mention here.

Most of the basic new features are in the Dubl-Response Control Unit mounted on a diaphragm valve. In the Recording Regulator is one of the most important —a sliding sensitivity mechanism which can be adjusted to meet the process time lag and the effect of load changes.

Mechanism of the Control Unit is rugged and suitable for outdoor installation. Taylor Singl-Duty Recording Regulators now in operation may be used in the system. The Dubl-Response Control Unit may be attached to the Taylor Evenaction Valve you may have in use.

If you have not received a special Bulletin on this new development, let us send you one. Let a Taylor Representative discuss its application to your particular temperature problems. Address Taylor Instrument Companies, Rochester, N.Y.

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Indicating · Recording · Controlling

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National Petroleum News, 735 Penton Bldg., Cleveland, Ohio

Crude Oil Prices

(In Effect June 12, 1933)

(Continued from page 75)

NORTH LOUISIANA-ARKANSAS
Prices of Standard Oil Co. of Louisiana
(Effective May 6, 1933)

Caddo, Homer, Haynesville, Sabine, DeSoto, El Dorado, Sarepta and Carterville $0.25
Smackover (Jan. 20, 1933) $0.20
Urania, La. (La. Oil Refg. Corp., May 6, 1933) $0.15

May 3, The Texas Co. posted flat price of $0.25 for all N. La. crude; and $0.20 for Smackover.

S. O. La. prices met as follows: May 6, Gulf Refg. Co. of La. in Caddo, Homer, Haynesville, Bull Bayou, Crichton, DeSoto and El Dorado; also La. Oil Refg. Corp.

***GULF COASTAL**
Posted by Humble Oil & Refining Co.
(Effective May 2, 1933)

All Gulf Coastal $0.30

May 3, The Texas Co. posted same price as Humble. *Includes these fields: Barbers Hill, Goose Creek, Hull, Humble, Liberty, Moss, Bluff, Orange, Pierce Junction, Rabbs Ridge, Raccoon Bend, Refugio light and heavy, Sour Lake, Spindletop, Sugarland and West Columbia.

ROCKY MOUNTAIN FIELDS
Posted by Stanolind Oil & Gas Co.
(Effective May 7, 1933)

Salt Creek, Wyo.	$0.25
Elk Basin, light	0.25
Elk Basin, heavy	0.20
Grass Creek, light	0.35
Greybull-Torchlight	0.35
Dutton Creek	0.25
Iles, Col.	0.25
Hogback, N. M.	0.50

Posted by Ohio Oil Co.
(Effective May 20, 1933)

Elk Basin, Wyo.	$0.35
Grass Creek, Light	0.35

(Effective Dec. 16, 1932)

Lance Creek	0.92

(Effective Jan. 24, 1933)

Rock Creek	$0.46

(Effective May 8, 1933)

Big Muddy	$0.25

(Effective May 9, 1933)

Sunburst, Mont.	$0.65

Crude Price Changes

FINDLAY, O. — Prices of various Rocky Mountain crudes have been in error in past issues of NATIONAL PETROLEUM NEWS. The Ohio Oil Co. made the following reductions on the dates and in the fields shown: May 8, Big Muddy, Wyo. crude 25 cents, to new price of $0.25 per barrel May 9, Sunburst, Mont., 10 cents, to new price of $0.65; May 20, Elk Basin and Grass Creek light, Wyo., 52 cents, to new price of $0.35 per barrel for both.

This publication was not previously advised of these changes.

TULSA.—Prices of the Stanolind Oil & Gas Co. on Rocky Mountain crudes have been revised in this issue, to show changes as of May 7. Price of salt creek crude was posted at $0.25 on May 7, rather than May 6, as has been shown in past issues.

Canada's Crude Production Down

OTTAWA—Crude production in Canada in February totaled 73,087,000 barrels, compared with 82,778,000 barrels in January, and 90,841,000 barrels in February a year ago, according to the Dominion Bureau of Statistics.

New U. S. DUAL Control
ONE POUND LUBRICATING GUN

A Single Shot or a Thousand Continuous Shots

U. S. Model ASG-1 Gun furnished complete with Zerk chuck and Alemite whip end hose

THE new U. S. Dual Control, One Pound Lubricating Gun is the only combination one shot and continuous operation gun on the market. The slightest touch of the convenient trigger and you have a single shot or a thousand continuous shots by holding the trigger—forcing the grease into the very heart of the lubricating point—no spilling or splashing on the fittings, but putting the lubricant where it belongs. No jamming or clogging—it works as smoothly and efficiently as clock work. The even, rhythmical sound of each shot bespeaks to the customer the thorough manner in which his car is being lubricated—yet it does not deafen him like the ordinary gun with its nerve racking, street hammer noises.

• U. S. Dual Control Lubricating Gun produces 7500 to 10,000 pounds grease pressure, is very attractive—sturdy and perfectly balanced. The operator can handle it easily with one hand—thus allowing the other hand free for pinch bar. It makes one man the master of any lubricating job whereas with other guns it requires two men—one to operate gun and the other for using a pinch bar.

• This new U. S. Gun handles all grades of chassis lubricants as well as the heavy fibrous ones.

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Kindly forward more detailed information on U. S. Model ASG-1 Dual Lubricating Gun.

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More Letters to the Editor On Standard of Indiana Discounts

By E. E. Smith, President, Smith Oil & Refining Co., Rockford, Ill.

WE HAVE read very carefully the nine points proposed by Mr. Allen Jackson, of the Standard Oil Co. and agree in general with everything which he proposes. We take exception to only one or two items. We do not agree fully with item No. 1. We have always felt that a large consumer, one using approximately from 500 to 1000 gallons per month, should receive at least 1 cent discount from service stations and by so doing bring into the open a discount which is most certainly to be given secretly, if not openly.

We also believe that the proposed Q.D.A. allows a spread of approximately ½ cent more than should be allowed.

With these exceptions we partly approve of the proposals which Mr. Jackson has presented.

* * *

By An Independent Jobber

THE 6-cent or more margin which we were supposed to make in the past was never in reality as most of the major companies outside of the S. O. were offering nearly 6 cents to some preferred dealers.

Such dealers in order to get the gallonage they are supposed to have to continue on the preferred list were obliged to give discount from 1 cent to 3 cents per gallon.

We know of several dealers who were urged to purchase their own truck and the oil company loaned them the tank and were allowed to haul to their own stations and receive 1½ cents per gallon as agent's commission, besides rental and Q. D. A. allowance, and the necessary painting and uniforms for the employees were furnished free.

The loan of equipment, as you know, has been done very freely, and as long as customers who already have such equipment are not obliged to pay for them, we believe there will always be free equipment furnished in order to enable the new dealers to compete with his neighbor.

We have at different times, at the Sioux City Petroleum Club meetings, brought out the question of discouraging the building of new stations, but have always met with enough opposition from managers who are working on commission to cause us to drop the subject.

You know, there are some major companies who have their managers working on gallonage, and the more they sell, the more they make, regardless of what they get for their gasoline.

The commercial discount at the filling stations which Standard proposed to drop will be of great benefit to the industry providing it stays with it. They have been taking it off and putting it back on again until the small dealers have lost faith in them, and doubt very much if the dealers will cut it out entirely for fear the S. O. may come out with something new and different, as usual, to the preferred customers.

* * *

By A. D. Dubuisson, President Wolverine Service Station, South Haven, Mich.

I HAVE read with much interest the article written by Vice-President Allen Jackson—"Trends in Marketing Practice." I would say that this item gives everyone interested in the oil business considerable to think of. I personally believe that it is high time we all put some honest effort to trying to bring this chaos to a conclusion.

When we speak of "over done" we can go right on through the entire industry. At the same time I believe this is no different than any other industry because it is very true that many of them have tried to hog all of it. This goes for the oil business, the grocery business, the drug business, and many others. It is all right for us to reach out and take what we can and try to take more and there is no law against its legitimacy but there certainly must be a time when the little fish should be entitled to a little of its earnings and not have the big fish try to take it all and then ask the little fish to stand by and not even pick up the crumbs.

When Mr. Jackson speaks of profits it certainly gives me a laugh, although I presume the major companies make a profit either through one method or another. I have had a great deal of pleasure in checking over the different balance sheets published by the different major companies and some of them must believe that the public are a bunch of damn fools. In one place they cry out for help on account of no profits and in the other place they publish, with a great deal of egotism, the wonderful profit they made this year over last and so on. How can you cry over both ends of the bone?

Well do I remember when the six-cent margin came in. I personally believe that it meant just as much profit to the individuals as it did to the Standard Oil Co. because I believe that if anybody invested it, with their long leases or expansion of outlets, or flat rentals, and many other unsound investments, they certainly were not in second or third place as far as I know. But on the other hand I must admit that they were not alone clamoring for the first rung on the ladder in this effort because they had many competitors right with them giving not a small share of their margin but a long share of their margin. Certainly we turn right back to what we said before. They can't give it away and have it.

I must admit this applies not only to jobbers, but to resellers, and even to small station operators. If he was allowed a fair rental he would find a way to give it away. This recalls to my mind the new idea of the major companies to lease an entire unit and pay a flat margin to the owner. Oh! what an opportunity for him to go out and take the hide and hair from the other fellow. What cares he of the price of gasoline? He is not interested whether the refiner gives it away or whether the refiner gets anything, just so he gets his 2½ cents or 3 cents plus rental for the bulk plant, and the major company is smart enough to furnish him all the equipment he can use. Surely he entices him on to this kind of action.

I can think of a spot in Benton Harbor where two major companies have been fighting for all the trucking business. They can't do it themselves by operating their own stations, so they sell through a dealer. The operator of the station naturally wanting the business shares with him a part of his 2½ cent profit allowed by the major company and he in turn gives the station operator the idea that he should allow the trucker a discount and who suffers? The poor old refiner, and then he is crying because he has no profits. By the way, neither of the two mentioned are the Standard Oil Co.

When we talk of providing equipment and painting signs, if anyone has been an offender of this rule I certainly must admit that the majors have been. Who if you please, offered the first flat rentals? Who started to give new types of meter pumps, replacing the old visibles that have not possibly paid their way? Who enticed these pump companies to continue to make new kinds of models and designs? Truly it never was any small company, because time and time again you hear the representatives of the pump companies telling you how many thousand pumps some major company is purchasing at one time from them. Does not all this bring about an unrest and turmoil in this industry?

I admit that possibly some of this has been brought about by the major companies competing with some loose-brain jobber who believes that the entire world is based on price and who,

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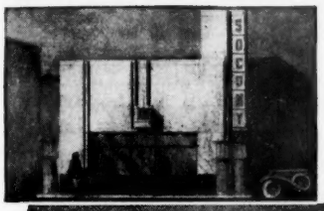

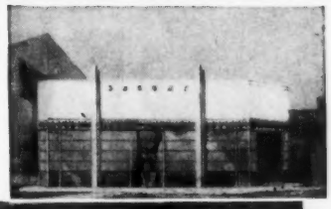

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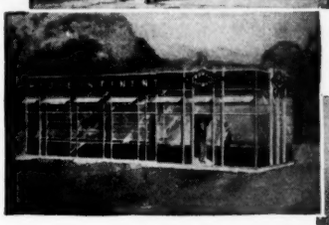

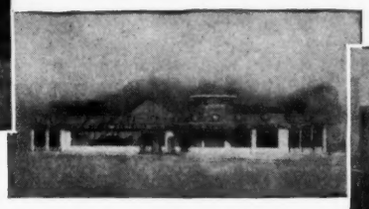

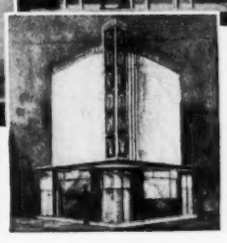

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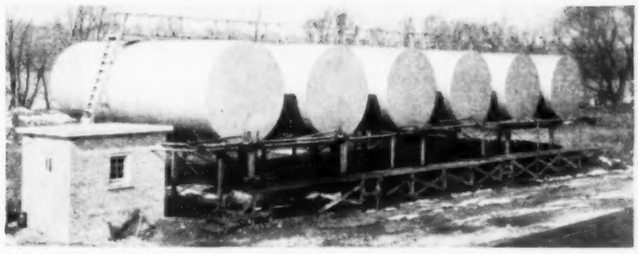

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owing to the fact that he buys a car of gasoline from a refiner at 2 cents a gallon, sells it for 13 cents a gallon, becomes nigger-rich and wants to go out and spend the whole works. He forgets he had to pay the freight and the tax, the salaries, the handling and the loss and shrinkage. This don't make any difference; he believes he made a lot of money that day because he took a big deposit down to the bank. That is the kind of birds that I presume disturbs the situation. I bet you any number of operating oil companies, major and independents, if they would actually put down their cost of selling gasoline through their own outlets or through the resale outlets (if they knew their cost), would probably drop dead or pass out of business.

Of course, the hard thing for us to swallow on the whole deal is that our territory has been clean and free from a great deal of price cutting and as far as any rentals, we have no flat rentals and we have stayed well within the margin of the present Q.D.A. When I think of this I certainly would like to have the Standard Oil Co. tell me how they can face the public and substantiate a reduction of 2.3 cents per gallon on gasoline. Why did they make the last kerosene cut? They had no trouble here and over a year ago they made the Michigan market 1 cent lower than any other market and then we had to take the bump on May 8th along with the rest of them.

Do they belive by this action they can cut down or prevent over-expansion? Of course, it is very evident that some of the fellows who are unfortunate enough to not have their house in order are going to suffer from this cut. This is all right if they can tell me why this should come about and why we should have a price such as we have and 25c crude.

I can think back a short time when a 4 cent contract was offered and 2 cents was the top that was paid to any resale account. Then I can think of the change when the Standard Oil Co. thought that, if they would segregate all the large industrial buying power and furnish them gasoline on a basis in accordance to their consumption, all these large major companies would rush into their station and buy all their requirements from them. If they could only see and would use the gray matter that God gave them they certainly wouldn't make errors of this kind.

They can't control all the industries. If they would offer to give the large packers, bakers, and candlestick makers their gasoline FREE, there would be some of us that would have a connection with some of these fellows who would say to themselves "Well what is all this about?" "Truly the other fellow will have to live, even though the gasoline is FREE, I will give him some of the business." Why don't they see these things, whether

these discounts are offered secretly or otherwise?

Then the next move was to try and drive all the farmers into their stations so they equalized the service station and tank wagon price. Oh! if this wasn't a smart idea. Boy! that one should go down in "History." When this didn't work then they went out and gave the farmers 1 cent per gallon on 25 gallons or more. May I say that we only met this proposition on a cash basis. I certainly hope that the majors won't answer back to this that all their business is CASH. If they do I will answer it by one word, that is HOOEY.

Then what was the next step? The great Q.D.A. When this was put in the Code came up and made it unethical to give equipment but it did not make it unethical to allow flat rentals on desirable corners and desirable locations. It did not prevent them from going out and taking on more accounts under five and ten-year contracts, giving these gentlemen also a flat rental and having an option to purchase. What do they do here? They furnish him all the equipment he might use, in some cases what he might need for two or three generations and next they step out and take the fellow who only has a small gallonage and is only entitled to a small Q.D.A.

Let's take, for example our own City. The Standard Oil Co. have four or five resale accounts, some of them are under a long term agency agreement with plenty rental. They have two of their own company stations. This in a town of less than 5000 and then I ask you if they have any right to talk about the other fellow being overbuilt. By the way, all these accounts are supplied with the latest type meter equipment. Then, lo and behold, in spite of this great idea of withholding, Moratorium and what not, they have their No. 1 station, which was built eight or nine years ago, which is as well built and as well kept as all Standard stations are. They now have plans and have let the contract to dismantle this station, tear it down if you please, and are going to rebuild it with a Super Service Station.

Then they talk about unsound, uneconomic ideas and practices, overexpansion, over-building and over-doing. Ye Gods, what can they ask the other fellow to do. Surely they are asking them to declare a moratorium for 60 or 90 days. Hands Off! if you please, give them the opportunity to get the chaff from the wheat. I presume, if they have the opportunity during this Moratorium to pick the A's and B's out of the wheat, they probably would throw up the chaff for the poor fish. Oh! what an idea!

Surely, we believe in line with No. 2 that the rentals should be reduced. So should this building program be reduced. Who built up this barrier? Who caused all this difficulty? Who

a Message
TO GASOLINE STATION OPERATORS
THE DILL LEAK DETECTOR
Just apply the Dill Leak Detector on the valve stem like an air chuck. If the valve leaks, the water in the Detector tube will bubble. You know, instantly, and so does your customer, that a new valve inside is needed. No guess work—no questions. Just efficient service and easy profitable sales.
ONLY 35c EACH
WATER BUBBLES IF VALVE LEAKS
AT considerable expense you provide FREE air service—inflate tires—test air pressure—for car owners. Have you thot about ways of paying for this expense with actual profit from your free air service?
There is a way. It is the Dill Plan for making air service pay cash profits. The Dill Plan works. It is a proven success. Cars by the thousands have lost tire valve caps—cars by the thousands need to replace leaky valve insides. The Dill plan shows how to find these profitable sales opportunities—quickly, surely—shows how to make sales easy.
Write, today, for a copy of the Dill Plan. It's free. Here is a profit-making opportunity you cannot afford to miss.
THE DILL MANUFACTURING CO.
CLEVELAND, OHIO
YOU PROFIT BY SELLING DILL
DILL
TIRE VALVES & ACCESSORIES
MAIL THIS COUPON for your FREE copy of the Dill Plan for making Free Air Service Pay Cash Profits.
Name
Company
Street
State
City

SKILLED SUPERVISION

Guarantees the Quality of Gulf Products

COASTAL AND PARAFFINE CRUDES
GASOLINE—LUBRICATING OILS
NAPHTHA—GAS—OILS
WAX—PETROLEUM COKE
CYLINDER—ENGINE—CORDAGE

Gulf Refining Company

General Sales Offices:
PITTSBURGH, PA.

District Sales Offices: New York, Boston, Philadelphia, Louisville, Atlanta, Houston, New Orleans

Gasoline And Other Motor Fuels

by Ellis and Meigs, is a book which gives a survey of the field and a description of practically every process of making gasoline and most other motor fuels of promise or prominence.

The price of the book is $10. Just send us your check and we will mail a copy of it to you.

National Petroleum News, 1213 W. Third St., Cleveland, Ohio

makes it tough for themselves and everybody else? I ask you, who sets the proposition? Only in setting it they don't know whether it is going to work to their advantage or to the other fellow so they always put in the old clause that it may be changed on 10 days' notice.

In the third paragraph, I think it would be better if there were no rentals at all.

In reference to No. 4 I do not believe that there should be any flat rentals whether they are leased for five or ten years. We have them under this term but we have not had to pay rentals.

I believe that No. 5 is correct, that anybody causing any difficulty should not only pay half of it but should stand it all.

No. 7—Wouldn't it be a great idea right now to put the practice of loaning and leasing pumps and other equipment clear out of the picture. Surely it is unsound and unethical and should be discontinued but the idea of discontinuing was not *early* enough. The other fellow has all the outlets he needs. This is generally true of most major companies. For instance, as I stated the condition at South Haven, what more do they need? They can easily request an adoption of rule No. 1 and certainly this would put all of us out of the running for securing new business whether it was major company's business or not.

In reply to No. 8, I presume that this would be a good idea owing to the fact that the majority of the business of the railroads of this country is secured by the Standard Oil Co. They have forced them to cancel all their hauling contracts. They don't like any one to have hauling contracts.

With reference to No. 9, I don't think that the local dealer has been creating a bad cut price situation half as much as 910 So. Michigan Av. They seem to be the ones that have been chiseling the price as far back as I can check and according to my graph there was a grand increase from March 1, 1915 until January 25, 1921 and then there has been a constant down trend of the price structure to the present date. I think the answer for that is that, from 1915 to 1921, the major companies had the greatest share of the potential business in every territory.

About this time there came a crying demand to help the little fellow and about this time the peak load of the market began to change. The business began to be divided and from then on they began to whittle and chop on the prices until this great potential business is divided in many ways and the major company, like the Jew that runs the small clothing store, gets price minded and only has one thing to look at, PRICE. I say he watches that more than he watches the profits and this has been shown by the financial statement issued by the major companies.

They have been more keenly interested in volume than they have in price.

I can think back just a few months ago when you, Warren Platt, called to their attention if they didn't get their house in order, that their stockholders were going to be knocking on their door and asking them *why?* Of course maybe this idea of reducing the profits is to reduce stockholders, because just a short time ago, the Standard Oil Co. used to run ad after ad telling that every employe was a stockholder and that the control of the company was not in any one's hands but the hands of the dear public. Was this true I ask you? Think of the Stewart & Rockefeller deal, if you please. Did the stockholders and Mr. Stewart control it?

Well anyhow, if there ever was a crying need for the reduction in the quantity discounts, for reductions in pump outlets and for better service and clean market and bringing back a fair and honest price situation, for a fair deal, a clean deal in this NEW DEAL, it is now. Now this oil industry contains the finest brains of any industry in the world. What has happened?

We have been giving away our products and striving for a livelihood and if this thing can be corrected by regional umpires let's have them. Let's have something that will bring about the right sort of spirit and thought on behalf of the public. It is high time that we are going to set an example that is going to bring back confidence. We don't have to set this example by giving away our merchandise either. 15 cent, 20 cent and 25 cent oil; 13 cent gasoline—The major part of this is tax and freight. The people don't expect it.

I believe that the code and the code meetings have probably corrected more unethical deals than any other method we have had and I believe that, if it is handled in a good, clean honest, upright way, every independent is going to be sold on the idea that it is just as much his Bible as it is the major companies'. Then we will get something from it. The trouble is that most of us read it and believe it all right but we go out and cheat a little bit here and there and think we are getting by. We all think maybe it is written for the other felow. It is just like church, just like anything else, just like your business—you can only get out of it what you put into it.

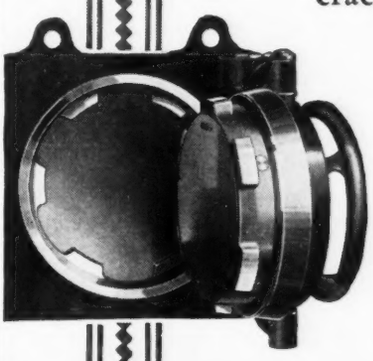
I recall an item written in one of your recent publications in which this writer said the only way to get an increased share of this juicy retail business was to build more and still more stations. Good sensible jobbers built two or three stations in a town where only one was needed. The large integrated oil companies should refrain from telling one thing and doing another. This is the answer to the whole situation and I am again confronted with the problem to try and figure out whether or not this has all been care-

TURN to the classified advertising page near the back of this issue. You will find some interesting items there . . . . . .

YOUR BEST PROTECTION

THE YORK Round Door Chest does more than reduce your insurance costs. It actually discourages attempts at burglary. For this sturdy little safe has a reputation in the underworld as an extra tough customer. Even the most experienced cracksmen have never been able to open one. A YORK Chest is the best protection you can get for your cash.

Write for illustrated folder describing the YORK Round Door Chest.



Anchored in a block of solid concrete, the YORK Chest provides complete protection against fire and theft. It cannot be removed from the building or attacked at any point except the heavy, thief-proof door. Supplied with special "hold-up partition" if desired.

YORK SAFES

YORK SAFE & LOCK COMPANY
YORK, PENNSYLVANIA.

MANUFACTURERS OF THE WORLD'S GREATEST VAULTS

Short Talks on Advertising

I.—Advertising-Minded America

Prepared by the
Bureau of Research and Education
ADVERTISING FEDERATION OF AMERICA

ADVERTISING is almost as old as business itself. Yet somehow it seems to be a characteristically American institution. It fits in with our way of living, our way of thinking, our way of doing business.

Throughout the world, Americans are known as a people whose lives are bound up with advertising. There is more of it here than in all other countries combined. Our overseas friends rightly give American advertising much of the credit for the amazing speed with which we popularize new things.

Advertising has inspired our eagerness to learn of new products, new inventions to make life more pleasant. We have been educated to depend on advertising to keep us informed. It shortens the gap between invention and utilization.

Thus we adopt improvements in our individual lives more quickly than do any other people on the globe.

The growth of any new industry depends on how rapidly people accept the product. Without advertising to introduce them, radios, oil burners, and mechanical refrigerators would probably still be struggling with the initial problems of attaining general distribution.

As new industries get under way, more workers find jobs and purchasing power is increased. And thus we raise our standard of living. Even now, in the midst of a severe depression, the average American standard of living is far higher than anywhere else in the world.

The American tempo is normally a fast one. Business builders think in terms of rapidly expanding markets and mass production. Advertising is their indispensable tool for accomplishing these. It is their high speed mass salesman and it does the job economically.

Advertising is our constant companion and our helpful friend. This nation without advertising would indeed be a dreary place. What would our women shoppers do without the daily displays of goods in the newspapers which they consult before sallying forth to market? How uninteresting would be our magazines without the colorful advertising now on their pages. How silent would become the radio waves if there were no advertising to sponsor broadcast programs, ever alert and responsive to the public taste in entertainment.

Perhaps the best reason why we Americans are so responsive to advertising is that we naturally have an insatiable desire for more of the things that make life worth living. We find all these things advertised, from education to home conveniences. We welcome the messages and pictures of articles which it is our ambition to possess.

This is the true spirit of material progress. With it comes cultural advancement, for culture must depend upon standards of living.

Advertising is more than a symbol of our national progressiveness. In its various forms, advertising has been a potent force in our almost unbelievable forward strides of the past thirty years. In one short generation we have seen the humblest homes become possessor of comforts and luxuries formerly denied to the most wealthy.

The ingenuity of inventors and engineers has been given a partner, advertising, and together they have performed miracles. Together they will help to raise American life to new heights of prosperity and satisfaction.

This is one of a series of fifteen articles prepared by the Bureau of Research and Education of the Advertising Federation of America, as a part of its program to promote a better understanding of advertising, renew the confidence of business men in its use, and increase its effectiveness as a marketing force.

ADVERTISING FEDERATION OF AMERICA
330 W. 42nd St., New York, N. Y.

fully planned to secure Federal control.

I think that, in the publication of the Chicago Daily Tribune, it indicates that the control and power of this is sought by the President. Oh! when I think of this and when I think of the men of outstanding ability that govern and control this industry to even think to invite the government into the oil business! Can any one of you show me where one single industry has ever profited by government control. When I think of the vast sums of money and methods used in just one department alone, the Postal Department, this is probably closest to all of us because we all contact this department. Perhaps of course, this may do one thing, that is to put the price cutter on a basis where he cannot offend our President by selling oil at a reduced price.

Wait until the Honorable President asks you to remove your 10 cent and 15 cent signs. Will he ask you to set a price that will be fair to the producer, the refiner, jobber, reseller, and the dear people? If he takes the latter into the same consideration as they have in the past in the way of taxation. Boy! the dear old public will certainly be in for a good old trimming and if you don't believe this just think of the great idea of adding ¾ of a cent more tax on an industry that is already overburdened with taxation at this time and still being taxed, and this ¾-cent does not mean they are going to stop there either.

I realize very fully that it is probably foolish for me to pass my opinion on this matter because no matter how I write or how I plan it someone is going to feel that I am stepping on their toes and perhaps my little territory may be set up as a martyr to the cause. There is just one thing that I can say in reply to this, that we have done everything possible to keep our territory clean and we have truth and justice on our side if this in any way will ward off the approaching danger.

* * *

By H. E. Milton, General Manager Milton Oil Co., Sedalia, Mo.

MR. JACKSON outlines the disease of the industry very closely and we agree with him fully in that phase of it.

We do not agree, however, with Mr. Jackson's remedy. We can not undo a thing overnight that was brought on by 10 or 12 years of poor marketing policies without creating a very serious condition in the industry.

Many refineries are going to be bankrupt because of their recent drastic reductions in retail price of gasoline. Many legitimate jobbers will follow the same road because of this condition.

Furthermore, if the policies sug-

gested in this article are put into effect it will put thousands of people out of work, which is serious now.

Right or wrong, every refiner, jobber, or dealer that has built his business based on 6-cent margins and 3½-cent and 4-cent marginal contracts to dealers should not be wiped out at this time because mistakes in marketing were made over a period of 10 or 12 years and because such conditions were allowed.

It should be made unprofitable to add new outlets and to build new service stations, but if we wipe out over night half of the outlets we now have we will add to the present seriousness of our unemployment situation very greatly and such a program certainly will not fit in with our present new deal that is being advocated by our federal government.

People that are in business at this time should be given a chance to work out their problems, and margins should be reduced as their gallonage increases. This, we believe, will be accomplished if we discontinue adding new outlets and with general improvement of business conditions.

Taxed Gasoline Demand Down 5.8% In March

NEW YORK, June 1

GASOLINE demand in the U. S., excepting New York state, totaled 1,009,116,000 gallons in March, a decrease of 62,526,000 gallons, or 5.83 per cent, under March a year ago, according to the American Petroleum Institute's compilation of tax returns in the various states made by wholesalers and dealers. March figures for New York state were not available at the time of publication of the report.

For the three months ended March, consumption was 2,816,651,000 gallons in the 47 states and District of Columbia, a decrease of 31,296,000 gallons, or 6.13 per cent under the corresponding period of 1932.

Detailed figures are given in the accompanying table.

Gasoline Consumption By States, March 1933

(Figures in Thousands of Gallons)

	Month of			% Change 1933 over	3 Months Ended With		% Change 1933 over
	Feb., 1933	Mar., 1933	Mar., 1932	1932	Mar., 1933	Mar., 1932	1932
Alabama	8,806	10,121	11,729	—13.71	28,527	33,644	—15.21
Arizona	5,014	5,428	6,332	—14.28	15,323	17,241	—11.12
Arkansas	7,598	7,303	8,177	— 9.95	24,089	27,321	—11.83
California	98,133	109,560	115,761	— 5.36	298,578	318,552	— 6.27
Colorado	9,320	11,353	13,330	—14.83	31,865	34,855	— 8.58
Connecticut	14,297	16,825	17,491	— 3.81	46,004	48,552	— 5.25
Delaware	2,859	2,422	2,975	—18.59	7,191	8,151	—11.78
District of Col.	7,313	8,472	7,661	+10.59	23,692	22,355	+ 5.98
Florida	19,115	19,095	20,191	— 5.43	57,777	62,012	— 6.83
Georgia	12,469	17,142	17,031	+ 0.65	45,250	50,109	— 9.70
Idaho	1,768	2,522	2,845	—11.35	6,562	7,817	—16.05
Illinois	58,071	68,339	69,881	— 2.21	191,492	206,375	— 7.21
Indiana	25,704	32,757	*37,034	—11.55	89,258	98,843	— 9.70
Iowa	20,254	25,421	26,428	— 3.81	71,503	71,520	— 0.02
Kansas	20,730	23,426	25,366	— 7.65	67,984	69,745	— 2.52
Kentucky	10,372	11,415	11,856	— 3.72	33,172	35,130	— 5.57
Louisiana	(a)10,689	11,439	13,662	—16.27	35,142	40,442	—13.10
Maine	5,036	5,191	5,486	— 5.38	15,624	15,795	— 1.08
Maryland	11,769	13,518	14,542	— 7.04	38,082	41,703	— 8.68
Massachusetts	32,566	37,624	40,562	— 7.24	103,533	110,659	— 6.44
Michigan	41,766	52,868	52,682	+ 0.35	144,206	159,655	— 9.68
Minnesota	20,267	27,012	28,154	— 4.06	72,193	73,561	— 1.85
Mississippi	7,087	7,293	9,030	—19.23	22,042	24,208	— 8.95
Missouri	29,691	34,133	36,407	— 6.25	99,237	101,993	— 2.70
Montana	2,591	4,614	4,203	+ 9.78	10,634	10,378	+ 2.47
Nebraska	11,575	13,182	16,087	—18.06	38,094	40,161	— 5.15
Nevada	1,188	1,442	1,742	—17.22	3,825	4,507	—15.13
New Hampshire	3,265	3,511	3,714	— 5.47	10,097	10,455	— 3.42
New Jersey	43,840	52,474	52,052	+ 0.81	141,050	150,297	— 6.15
New Mexico	2,930	3,497	3,625	— 3.53	9,560	10,109	— 5.43
New York	(March 1933 figures not available at time of this publication)						
North Carolina	15,867	16,778	17,265	— 2.82	50,201	55,242	— 9.12
North Dakota	2,698	6,649	7,563	—12.08	13,404	13,628	— 1.64
Ohio	55,675	62,110	72,227	—14.01	185,019	198,036	— 6.57
Oklahoma	18,093	19,974	22,395	—10.81	59,860	63,507	— 5.74
Oregon	11,723	14,208	15,254	— 6.86	35,769	35,647	+ 0.34
Pennsylvania	64,020	74,930	78,136	— 4.10	207,238	221,948	— 6.63
Rhode Island	6,060	8,058	7,384	+ 9.13	20,908	20,278	+ 3.11
South Carolina	7,089	9,340	8,649	+ 7.99	24,767	24,661	+ 0.43
South Dakota	6,012	8,109	7,982	+ 1.59	21,192	18,530	+14.36
Tennessee	13,033	13,468	14,831	— 9.19	40,228	44,519	— 9.64
Texas	(b)48,175	56,931	61,679	— 7.70	(b)161,518	170,412	— 5.22
Utah	2,901	3,774	3,424	+10.22	10,056	10,258	— 1.97
Vermont	2,073	2,144	2,414	—11.18	6,134	6,694	— 8.36
Virginia	14,794	17,951	17,063	— 5.20	49,605	49,337	+ 0.54
Washington	15,078	19,997	21,949	— 8.89	50,437	52,843	— 4.55
West Virginia	7,074	8,223	8,595	— 4.33	23,016	25,060	— 8.16
Wisconsin	21,152	24,935	26,510	— 5.94	70,003	78,019	—10.27
Wyoming	1,606	2,138	2,286	— 6.47	5,710	5,904	— 3.28
Total	859,206	1,009,116	1,071,642	— 5.83	2,816,651	3,000,668	— 6.13
Daily Average	30,686	32,552	34,569	— 5.83	31,296	32,974	— 5.09
Change from previous year:							
Total decrease	.....	62,526	.....	184,017	.....		
Percentage decrease in Daily Average	.....	5.83%	.....	—5.09%	.....		

(a) Revised.

(b) Revised: January 1933, by addition of 110,000 gallons; February 1933, by addition of 87,000 gallons.

*Figures for 1932, published in Bulletin No. 17 of American Petroleum Institute, of March 30, are on a comparable basis with the accompanying 1931 figures. The above figures for 1932, due to a change in reporting in January 1933, have been placed on a comparable basis with current figures.

THE OIL INDUSTRY EXCHANGE

Positions Wanted

GASOLINE OIL SALESMAN—experienced also in supervising marketing districts for two major companies in Ohio and Pennsylvania, desires connection as refinery representative, Ohio preferably. Qualified to handle complete line. Fifteen years experience. Address Box 995.

DUE TO LIQUIDATION of present company, lubricating oil executive with 12 years experience as sales manager, assistant manager, special representative and branch manager both industrial and automotive. Eight years with major company in East, four years Middle West. Capable of handling wholesale department. Successful past record and recommendations. Address Box 996.

For Sale

GASOLINE PUMPS FOR SALE, used 5-gallon hand driven curb pumps. Gilbert & Barker T78, Bowser 97, Wayne 276. In good mechanical condition. $15.00 each FOB Boston. United Tank & Installation Co., 29 Line St., Cambridge, Mass.

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ETHYL GASOLINE CORP. METHODS
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Miscellaneous

Advertisers having box numbers should be addressed in care of National Petroleum News, 1213 West 3rd Street, Cleveland Ohio, unless otherwise specified

Transactions in Oil Stocks on New York Stock Exchange

1932 High	1932 Low	1933 High	1933 Low	Listed Shares	Par Value	Company	Div. Rate Period	Last Div. Paid	Transactions Week Ended June 10 Sales Shares	High	Low	Last	Week's Change
22¾	12	39⅜	18½	922,070	N.P.	Amerada Corp.	50cQ	Apr. 29, 33	16,900	38⅝	36¼	37	2
16¾	6½	20	6¾	2,240,000	$25	Associated Oil Co.	25cQ	Mar. 31, 33	10	18	18	18	— 2
21⅞	8⅝	27½	12⅜	2,696,652	25	Atlantic Refining Co.	25cQ	Mar. 15, 33	104,100	*27½	24¼	27	+ 2
7	3⅜	9¾	3	2,258,779	5	Barnsdall Corp.	....	May 11, 31	72,900	9¼	8⅛	9⅛	+ ⅝
12½	9	12	9⅞	1,444,970	N.P.	Colonial Beacon Oil Co.	....	.....	100	8	8	8	— 2½
9	4	13¼	5	14,218,835	N.P.	Consolidated Oil Corp.	....	.....	594,700	*13¼	10¾	13	+ 2⅛
101	79	100¼	95½	136,012	$100	do pfd.	$2Q	May 15, 33	100	99¼	99¼	99¼	0
9⅜	3⅝	15	4⅞	4,722,432	N.P.	Continental Oil Co.	....	.....	159,200	14¾	12¾	14¼	+ 1⅛
15½	4¾	17⅜	4⅝	413,333	N.P.	General Asphalt Co.	....	June 15, 32	13,700	17	15¾	16½	0
28¼	8¾	32⅜	8¼	95,841	$100	Houston Oil Co.	....	.....	24,200	*32⅜	27⅞	31⅜	+ 3⅜
5⅜	1⅝	6⅛	1⅞	678,234	25	do new.	....	.....	19,700	6	5⅝	5⅝	— ⅛
2¾	1	4¼	1⅛	1,207,082	10	Indian Refining Co.	....	Dec. 15, 20	4,000	*4¼	2⅞	4¼	+ 1⅛
2¼	½	3⅜	⅝	1,309,060	N.P.	Louisiana Oil Ref'g. Corp.	....	.....	3,800	3	2¾	2⅞	— ⅛
18	3	19	3½	40,000	$100	do pfd.	....	May 16, 32	50	16¾	15	15	— 3⅞
1½	⅜	2⅞	½	330,000	N.P.	Maracaibo Oil Exploration Co.	....	.....	1,300	*2⅞	2⅛	2¾	+ ¼
65	50	58½	55	449,083	$100	Mexican Petroleum Co.	....	Apr. 20, 31	....	....	....	....	....
8⅞	3¾	11⅞	3¾	1,857,912	N.P.	Mid-Continent Petroleum Corp.	....	Feb. 16, 31	30,400	11⅞	10⅝	11¾	+ ¾
11	5	14⅞	4¾	6,548,052	N.P.	Ohio Oil Co.	....	Dec. 15, 32	115,400	*14⅞	12½	14½	+ 1¾
14	6	12⅝	12	1,000,000	$5	Pan Amer. Pet. & Transp. Co.	....	Mar. 15, 33	200	10	8⅛	10	+ 2
14½	7¼	12½	11½	2,474,886	5	do B non-voting.	....	Mar. 15, 33	....	....	....	....	....
1¼	¼	3½	⅜	199,370	N.P.	Panhandle Prod. & Ref'g. Co.	....	.....	24,800	*3½	1½	2¼	+ ¾
14	3½	10½	5¾	25,666	$100	do pfd.	....	July 2, 23	....	....	....	....	....
7⅛	3	12⅛	4⅝	2,236,944	5	Petroleum Corp. of America.	....	June 1, 31	33,000	*12⅛	10⅛	11¾	+ 1¼
8⅛	2	14¾	4¾	4,433,801	N.P.	Phillips Petroleum Co.	....	Jan. 2, 31	107,400	14½	12⅜	14	+ 1
¾	¼	1⅝	¼	1,184,817	$25	Pierce Oil Corp.	....	.....	48,900	*1⅝	1⅛	1⅝	+ ½
9	3½	11¼	3⅞	150,000	100	do pfd.	....	Feb. 1, 22	1,500	10¾	10⅛	10½	+ ¼
1⅝	½	2	⅝	2,500,000	N.P.	Pierce Petroleum Corp.	....	Feb. 16, 31	27,600	2	1¾	2	0
12½	8½	17	6¾	1,050,000	$5	Plymouth Oil.	25cQ	Mar. 31, 33	49,200	16¼	15	15¼	— ⅜
9½	3½	9¼	5⅝	2,441,432	25	Prairie Oil & Gas Co.	....	Mar. 31, 31	....	....	....	....	....
12¼	5½	18¼	7	4,050,000	25	Prairie Pipe Line Co.	....	July 1, 31	1,000	*18¼	17	18¼	+ ¼
1⅝	⅝	2	¼	749,017	50	Producers & Refiners Corp.	....	Sept. 15, 23	9,000	2	1¾	1⅞	0
9¾	1	10	3	28,310	50	do pfd.	....	May 4, 25	200	*10	9	9⅝	+ ⅝
6½	2⅞	8½	2½	2,038,370	N.P.	Pure Oil Co.	....	Sept. 1, 30	48,200	*8½	7¾	8¼	+ ⅜
80	50	62	30	180,000	$100	do 8% pfd.	50cQ	Apr. 1, 33	380	53⅜	50⅛	53⅛	+ 2⅝
1⅝	¼	3	¼	2,126,250	N.P.	Richfield Oil Co. (California)	....	Sept. 1, 30	66,400	*3	1½	2½	+ 1⅛
23¾	12⅛	28⅛	17⅝	433,814	$13.40	Royal Dutch Co. (N. Y. shares)	80½c	Aug. 5, 32	8,800	*28⅛	26¼	28⅛	+ ¾
20⅝	6⅝	33½	15	1,244,383	N.P.	Seaboard Oil Co. of Del.	††10cQ	Mar. 15, 33	25,200	32	30	31	+ ¾
16⅜	8	18	11¼	57,192	£2	Shell Transport & Trading Co.	53c	July 22, 32	30	18	18	18	0
8¾	2½	8⅝	4	13,070,625	N.P.	Shell Union Oil Corp.	....	June 30, 30	82,900	8¼	7⅜	7⅞	+ ⅛
65¼	18	49⅞	28½	400,000	$100	do pfd.	....	July 1, 31	1,400	48	44¼	44¼	— 5⅜
7½	3¼	12⅜	4⅞	500,000	10	Simms Petroleum Co.	....	Jan. 16, 33	9,900	11⅝	10½	11¼	+ ¾
5¾	2½	9⅞	3	1,000,000	25	Skelly Oil Co.	....	Dec. 15, 30	5,200	9¼	8¾	8⅞	— ⅜
33½	12	37¼	22	120,000	100	do pfd.	....	May 1, 31	800	*37¼	36	37¼	+ ¾
12¼	5¼	12	6	31,693,086	25	Socony Vacuum Corp.	10cQ	Mar. 15, 33	211,000	11¾	11	11½	+ ⅛
100½	81	102	92½	764,925	100	S. O. Export Corp. pfd.	$2.50S.A.	Dec. 31, 32	900	*102	100	100	+ 2
31⅞	15⅛	34½	19½	13,102,900	N.P.	S. O. California.	50cQ	Mar. 15, 33	55,500	34⅜	32	34¼	+ 2¼
16½	7	26½	12¾	320,000	$10	S. O. Kansas.	....	Mar. 16, 31	....	....	....	....	....
37⅜	19⅞	37½	22¾	25,740,965	25	S. O. New Jersey.	25cQ	Mar. 15, 33	147,900	*37¾	35¼	37⅜	+ 1⅜
39⅞	24¾	44½	35	1,590,406	N.P.	Sun Oil Co.	25cQ	Mar. 15, 33	700	44	41¾	44	+ 2¾
92	68	100	89	100,000	$100	do pfd.	$1.50Q	Mar. 1, 33	230	*100	98	100	+ 2½
2	¼	3⅜	¾	776,979	N.P.	Superior Oil Corp.	....	.....	12,100	3	2⅝	2¾	— ¼
18¼	9¼	23¼	10¾	9,851,236	$25	The Texas Corp.	25cQ	Apr. 1, 33	106,200	22¾	20¾	22½	+ ½
4	1½	6½	1⅜	930,507	10	Texas Pacific Coal & Oil Co.	....	Dec. 31, 29	25,500	5⅝	5	5½	0
5⅝	2	8	3⅛	5,998,919	N.P.	Tide Water Associated Oil Co.	....	Feb. 16, 31	59,500	7⅞	7	7⅝	+ ⅛
60	20	65	23½	695,503	$100	do pfd.	....	Jan. 3, 33	5,400	42½	39½	40⅛	— 3⅛
10	5	16	9¼	2,191,954	N.P.	Tide Water Oil Co.	....	Dec. 31, 32	100	*16	16	16	+ ½
62	30	65	45	199,446	$100	do pfd.	$1.25Q	May 15, 33	200	65	65	65	0
15⅜	8	17¾	8½	4,386,070	25	Union Oil of California.	25cQ	May 10, 33	31,200	17¾	16⅛	17⅛	+ ⅛
19¼	11¾	22¾	10½	1,254,048	N.P.	Union Tank Car Co.	35cQ	Mar. 1, 33	4,200	21⅝	20⅜	21¼	+ ¼
2¼	½	4⅞	⅝	769,531	N.P.	Warner Quinlan Co.	....	July 3, 30	17,500	*4⅞	3	4½	+ 1½
8¼	2¾	5½	2	431,427	N.P.	H. F. Wilcox Oil & Gas Co.	....	May 10, 28	7,500	5¼	4½	4⅞	— ⅜

*New high. †New low. ††Also extra—Seaboard 10c.

Standard Oil Stocks on New York Curb Market

1932 High	1932 Low	1933 High	1933 Low	Shares Issued	Par Value	Company	Div. Rate Period	Last Div. Paid	Transactions Week Ended June 10 Sales Shares	High	Low	Last	Week's Change
7	6	13	6	40,000	$25	Borne Scrymser Co.	....	Oct. 15, 30	104	*13	8¾	11¼	+ 3¼
35	17½	39	25	200,000	50	Buckeye Pipe Line Co.	75cQ	Mar. 15, 33	100	37	37	37	— 2
90	53	115	71	120,000	25	Chesebrough Mfg. Co.	††$1Q	Mar. 31, 33	100	*115	107	113½	+13¼
3⅛	1¾	6¾	2¼	5,977,873	N.P.	Creole Petroleum Co.	....	.....	46,500	*6¾	5¼	6⅝	+ 1
35	18	29	20	50,000	$100	Eureka Pipe Line Co.	$1Q	May 1, 33	200	*29	29	29	+ 1
55	35⅝	78½	40	2,974,645	25	Humble Oil & Refg. Co.	50cQ	Apr. 1, 33	8,900	*78½	71	78½	+ 8
10⅞	6¼	12	6⅛	26,742,792	N.P.	Imperial Oil Corp. coup.	12½cQ	Mar. 1, 33	10,600	11¾	11⅛	11½	— ½
10⅛	6¼	11⅞	6⅛	....	N.P.	do registered.	12½cQ	Mar. 1, 33	1,500	11¾	11	11	— ⅞
7½	2¾	8	3⅛	300,000	$10	Indiana Pipe Line Co.	15c S.A.	May 15, 33	600	*8	7½	7½	+ ⅛
12¼	8	15⅜	8⅞	14,247,088	N.P.	International Petroleum Co.	25cQ	Mar. 15, 33	16,800	*15⅜	14⅛	15	+ ½
10½	6	10	5½	509,000	$12.50	National Transit Co.	....	Dec. 15, 32	400	9⅛	8½	8½	— ½
6	2¼	4⅝	3	100,000	5	New York Transit Co.	15c S.A.	Apr. 15, 33	200	*4⅝	3⅞	4⅝	+ 1⅛
5½	3⅛	6	4¼	120,000	10	Northern Pipe Line Co.	25cS.A.	Jan. 2, 33	600	6	5¼	6	+ ½
79	60	79½	70¼	580,749	100	Ohio Oil Co. pfd.	$1.50Q	Mar. 15, 33	300	*79½	79½	79½	+ 2
10	1¾	3¼	1¼	400,000	25	Penn Mex. Fuel Co.	....	May 25, 32	104	*3¼	3¼	3¼	+ ¼
10	3¾	6	2¾	100,000	10	Southern Pipe Line Co.	10cQ	Mar. 1, 33	400	5¾	5	5¾	+ ¼
16½	9⅝	18	11	1,200,000	25	South Penn Oil Co.	25cQ	Mar. 31, 33	1,100	*18	16⅛	17⅝	+ 1⅛
37	27	34	24½	35,000	50	South West Pa. Pipe Lines.	$1Q	Apr. 1, 33	50	*34	34	34	+ 1¾
25⅛	13⅛	30⅛	17	16,908,543	25	S. O. Indiana.	25cQ	Mar 15, 33	23,400	30	28	29¾	+ 1¾
15⅞	8⅛	17¾	8⅛	2,606,983	10	S. O. Kentucky.	25cQ	Mar. 31, 33	5,100	17⅛	15¾	16⅞	— 1¾
19	10¼	17½	11	190,822	25	S. O. Nebraska.	25cQ	Mar. 20, 33	100	15¾	15¾	15⅞	— ⅛
30⅛	15½	26½	15½	752,465	25	S. O. Ohio.	....	Jan. 3, 33	950	25⅞	23	25⅞	+ ⅞
87	75	85½	60	120,000	100	do 5% pfd.	$1.25Q	Apr. 15, 33	20	*85½	85½	85½	— ½
2	1⅝	2¾	1	34,158	25	Swan Finch Oil Corp.	....	Jan. 15, 32	100	2½	2½	2½	+ ⅛

*New high. †New low. ††Also extra—Chesebrough 50c.

Refinery Accidents Lower

WASHINGTON, June 12.—Refineries in Louisiana continued to reduce their accident record in 1931, both as to frequency and severity according to a report just issued by the U. S. Bureau of Mines (I. C. 6721). Frequency rate was 4.49 per million man-hours worked as compared with 10.06 in 1930 and 19.54 in 1929. Severity rate was 1.15 days lost per thousand man-hours of exposure as compared with 1.12 in 1930 and 1.67 in 1929.

F. E. Cash, author of the circular, suggests that the use of hard-toed shoes and leggings worn for certain classes of work, goggles where necessary and more attention to conditions which result in slipping or falling would lower accidents still further.

Oil and Royalty Stocks on New York Curb

1932 High	1932 Low	1933 High	1933 Low	Par Value	Company	Transactions Week Ended June 10 Sales Shares	High	Low	Last	Week's Change
¾	¼	1⅛	⅛	N.P.	American Maracaibo..	28,000	1⅛	⅞	1	0
3¾	¾	5½	1⅛	N.P.	Arkansas Nat. Gas....	6,000	4½	3½	3⅞	— ⅝
3⅝	½	5	1	N.P.	do A.....	24,500	3⅝	3⅛	3¼	— ½
5⅝	1½	4⅞	2	$10	do pfd.....	400	4½	4¼	4¼	— ½
¼	⅛	..	..	N.P.	Atlantic Lobos.....	.....	....	....	....	....
⅞	½	2	¾	$50	do pfd.....	.....	....	....	....	....
9¾	6¾	11⅜	6⅛	N.P.	British Amer. Oil coup.	300	11¼	11⅛	11¼	0
¾	¼	2¾	¼	$¼	Carib Syndicate.....	85,500	*2¾	1	2⅜	+ 1¾
6⅞	1¼	6¼	2	N.P.	Cities Service.....	37,100	5½	4⅝	5⅛	— ¼
53⅜	10	30	10½	$100	do pfd.....	2,300	25⅜	21½	25	— 1
4½	1	3⅜	1	10	do pref. B.....	900	3⅝	3⅛	3⅛	— ⅛
45	9	25	5	100	do pref. BB.....	140	20	19¼	19¾	— ¼
1¼	¼	2¼	⅛	N.P.	Colon Oil Corp.....	15,700	2¼	1⅝	2	0
2⅜	½	2⅞	⅜	N.P.	Columbia Oil & Gas vtc.	9,800	*2⅛	1⅝	2⅛	+ ½
..	..	2⅞	1	$1	Consolidated Royalty..	100	2⅝	2⅝	2⅝	— ⅛
2⅞	¼	5½	1⅛	N.P.	Cosden Oil.....	300	5½	4¼	4¾	— ¾
8	1⅛	10	2½	$100	do pfd.....	100	*10	10	10	+ 1
⅝	⅛	⅞	⅜	N.P.	Crown Central Pet....	3,100	⅞	⅝	⅞	+ ⅛
7¼	1¾	6½	2⅛	N.P.	Darby Petroleum.....	1,700	6⅜	5¾	6	— ¼
3	1	2¾	⅞	N.P.	Derby Oil & Refg.....	400	2¾	2	2	— ½
24½	10¼	25¼	25	N.P.	do pfd.....	.....	....	....	....	....
44¾	23	57⅞	24	$25	Gulf Oil Corp.....	16,800	*57⅞	52⅛	56¾	+ 3¾
5	¾	5¾	1¼	N.P.	Indian Ter. Illg. Oil A	100	5¼	4½	4½	— 1¼
4½	1½	5¾	1¼	N.P.	do B.....	500	5	5	5	— ¾
¾	⅛	1	⅛	$5	Intercontinental Pet...	.....	....	....	....	....
1	⅛	2	⅛	N.P.	Kirby Petroleum.....	1,600	2	1⅝	1⅝	— ⅜
⅝	⅛	1½	⅛	$25	Leonard Oil Dev.....	32,300	*1½	½	1	+ ⅜
3½	⅛	4⅜	1¼	N.P.	Lion Oil Refg.....	100	4	4	4	— ⅜
11	3⅜	10	4¾	N.P.	Lone Star Gas.....	3,900	*10	9⅛	9⅞	+ ⅜
¾	⅛	..	..	$1	Magdalena Syndicate..	.....	....	....	....	....
8	3⅛	6½	4	N.P.	Margay Oil Co.....	.....	....	....	....	....
3⅝	1½	5	2	N.P.	Mexico-Ohio Oil.....	300	3	3	3	— ¾
2	½	4⅜	1	N.P.	Michigan Gas & Oil....	300	4¼	4	4⅛	+ ⅛
1½	½	1⅞	⅝	N.P.	Mid. States Pet. A vtc.	.....	....	....	....	....
⅝	¼	⅞	¼	N.P.	do B vtc.....	.....	....	....	....	....
¾	¼	⅝	¼	$1	Mountain & Gulf.....	1,100	⅝	½	⅝	+ ¼
4¾	2⅛	6½	2½	10	Mountain Producers...	3,600	6⅜	5⅜	5⅞	— ⅜
14⅜	8	20	10	N.P.	National Fuel Gas.....	3,600	19¼	17¼	18	— ½
⅝	⅜	1⅜	½	$5	New Bradford Oil.....	1,600	*1⅜	1⅜	1½	0
1½	⅝	2½	½	N.P.	North Central Texas..	300	2⅛	2	2⅛	+ ⅛
⅝	⅛	⅜	⅛	N.P.	North European.....	800	⅜	⅝	⅜	+ ⅛
5	2	6⅞	3	N.P.	Oil Stocks Ltd. A.....	200	*6⅞	6¾	6⅞	+ ⅛
8	3	6⅝	3	N.P.	Pacific Western.....	400	6	5½	6	— ½
⅝	⅛	1¼	⅛	N.P.	Pantepec of Venezuela	9,700	*1¼	¾	1	+ ¼
⅝	⅛	1¼	½	N.P.	Producers Royalty....	14,500	*1¼	½	1¼	+ ½
60¾	40	45	21	$100	Pure Oil 8% pfd.....	280	36½	34¾	36	+ 1
1	½	2½	⅜	N.P.	Red Bank Oil.....	1,000	*2½	1	2½	+ 1½
½	⅛	¾	¼	N.P.	Reiter-Foster Oil.....	2,600	*¾	⅝	¾	0
1	⅛	2¼	¼	$25	Richfield Oil pfd.....	3,700	*2¼	1⅝	1¾	+ ¾
1½	½	5	3	N.P.	Root Refining pfd.....	100	*5	4¾	5	+ 1
½	½	..	..	$10	Royalty Corp. pfd.....	.....	....	....	....	....
2⅛	⅛	4	⅝	N.P.	Ryan Consolidated....	4,100	*4	2½	4⅛	+ 1⅜
⅞	⅛	..	⅝	$10	Salt Creek Consol.....	500	*¾	½	¾	+ ¼
5½	2⅞	9	3½	10	Salt Creek Prod.....	4,900	8½	7⅛	7¾	— ¾
..	..	3¾	⅝	25	Shrev. El Dorado P.L.	.....	....	....	....	....
5	2⅞	6⅜	3¼	N.P.	Southland Royalty....	4,500	*6⅜	5½	5⅞	+ ⅜
⅝	¼	1⅜	¼	$5	Sunray Oil.....	3,800	*1⅜	¾	1⅜	+ ½
10½	4½	13	6¼	N.P.	Texon Oil & Land.....	3,800	11⅝	8½	8⅞	— 3⅝
⅛	⅛	1⅝	⅛	$5	Venezuela Petroleum..	1,800	*1⅝	⅛	1⅜	+ ⅝
2⅜	1⅛	3	1½	1	Woodley Petroleum....	400	2⅜	2	2¼	+ ¼
1⅜	½	..	¾	½	N.P.	Y Oil & Gas.....	.....	....	....	....	....

*New high. †New low.

Pittsburgh Stock Exchange

Transactions Week Ended June 9, 1933

	Sales	High	Low	Last	Change Over Week
Ark. Nat. Gas....	270	4⅞	4	4	—1
do pfd.....	400	4½	4¼	4¼	0
†Col. Gas & Elec..	2,676	22⅝	19⅝	22⅜	+2⅜
Devonian Oil....	35	9	8½	9	+ ½
‡Gulf Oil of Pa....	3,300	57¼	55¾	57¼	+2¾
‡Leonard Oil & Dev.....	14,275	1¼	¾	1⅛	+ ⅝
†Lone Star Gas...	16,169	10	9	9⅞	+ ⅛
‡ do 6 p. c. conv. pfd.....	60	82	80	82	+2
‡ do 6½ p. c. conv. pfd.....	45	80	80	80	0
Phoenix Oil.....	2,100	.10	.06	.10	+.05
Plymouth Oil....	1,170	15⅞	15	15½	—1
West. Pub. Serv..	6,951	7⅞	7⅝	7¾	+ ¼

†Payable in new preferred stock. ‡Unlisted.

Pittsburgh Curb

Ark. Nat. Gas A..	200	3½	3⅜	3½	....

New York Curb Bonds

Week Ending June 10

	High	Low	Last	Change
Cities Serv. 5s '50.....	44¼	40¾	41½	—2¾
Cities Serv. 5s '66.....	42¾	40	40	—3
Cities Serv. G. 5½s '42..	61	59¼	59¾	— ½
Cont. Oil 5¼s '37.....	98¾	98	98½	+ ½
Empire O & R 5½s '42..	51	49⅝	49⅞	—1⅛
Gulf Oil 5s '37.....	100¼	99½	100	— ¼
Gulf Oil 5s '47.....	100	98½	100	+1¾
Indep. Oil 6s '39.....	98	98	98	+2
Sun Oil 5½s '39.....	101¾	101	101	— ½
Sun Oil 5½s '34.....	101	100¾	101	+ ½
Tide Water Oil 5s '79...	62⅞	57	62⅞	+5⅞

New York Bonds

Week Ending June 10

	High	Low	Last	Change
Asso. Oil Gold 6s.....	103	103	103	— ¼
Atlantic Refg deb. 5s...	102¾	101⅞	102½	0
Cal. Pet. 5s.....	91	89½	90	+3
Cal. Pet. 5½s.....	92½	91	91½	+ ½
General Pet. 5s.....	103⅛	102⅝	102¾	+ ⅛
Humble Oil & Refg. 5s..	104	103	104	+1
Pan Amer. Pet. of Calif. 6s	39	35	38½	+ ½
Pan Amer. Pet. of Calif. 6s ctfs..	37	36¾	37	—1
Phillips Pet. 5¼s.....	85¼	84	84	—1
Pure Oil 5½s.....	84	83	84	+ ½
Pure Oil 5½s.....	82	79½	81	— ¼
Richfield Oil of Calif. 6s..	32½	29½	31	+1
Richfield Oil of Calif. 6s ctfs.....	30	28⅝	30	+1⅜
Shell Union Oil 5s.....	78¼	78	78¼	+1¼
Shell Union Oil 5s w.w...	80	78	79	0
Sinclair Con. Oil 7s.....	100	99	99¾	0
Sinclair Con. Oil 6½s....	98½	97	97⅞	— ⅛
Sinclair Pipeline 5s.....	102½	102	102¼	+ ¼
Skelly Oil 5½s.....	80½	79¼	79¼	— ¾
S. O. N. J. 5s.....	104⅞	103½	104⅞	+1
S. O. N. Y. 4½s.....	99¾	97⅞	99¾	+1¾
Union Oil of Calif. 6s A..	104¼	103½	104	+ ½
Union Oil of Calif. 5s C..	100⅛	100⅛	100⅛	— ⅛
Union Oil of Calif. 5s w.w.	92	89½	92	— ½
Warner-Quinlan 6s.....	38	33½	35⅛	+1⅞

CLEVELAND — Complete Reciprocity to all non-resident truck owners, private and for-hire is now allowed in Pennsylvania under terms of a new law. Last year the legislature denied reciprocal tag privileges with other states causing an expensive border warfare.

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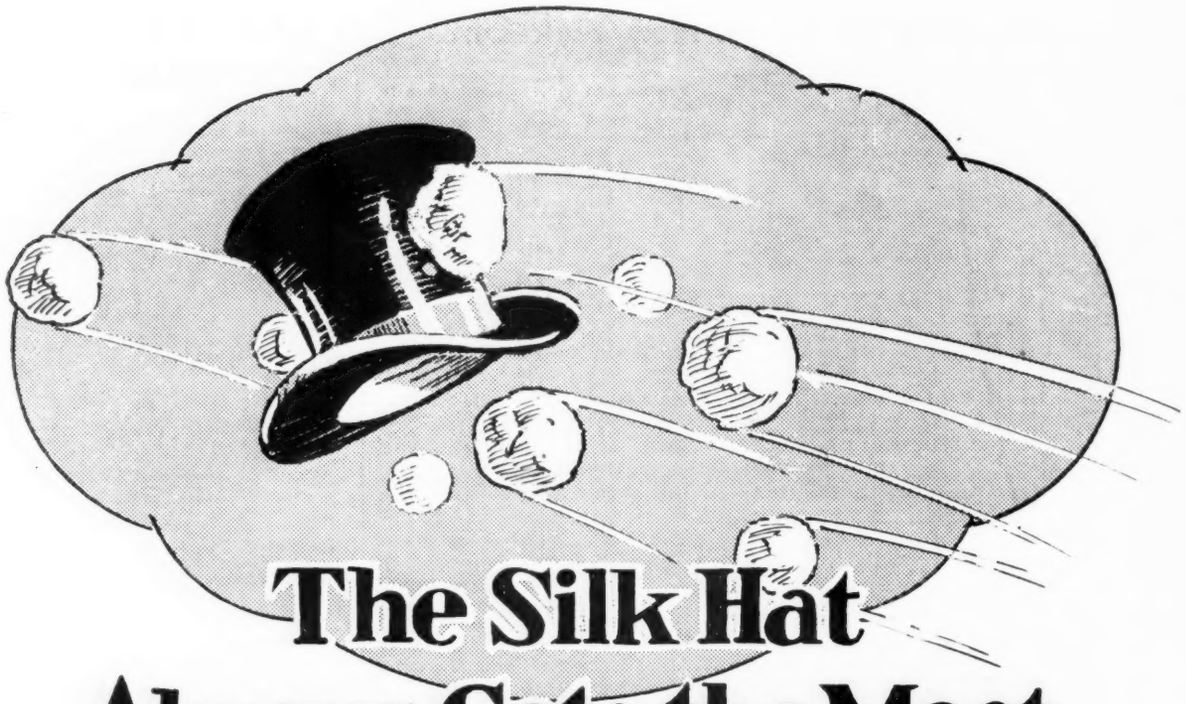


The Silk Hat Always Gets the Most Snowballs

You know what happens when a silk hat hoves into the sight of any group of mischievous "snow-ballers". The fedoras and every day "bennies" are momentarily forgotten for the more expansive target area of the topper.

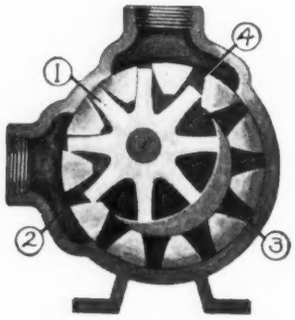
We are not attempting to draw an analogy to the effect that we are either silk or "high" hat . . for we are very definitely neither.

The moral is contained in the fact that the larger any business or institution looms on the horizon, the more easily and quickly does it attract the imitators . . with their figurative snow-balls, in the form of imitations.

In spite of the fact that some of our imitators have gone to quite extreme lengths in their mimical efforts we have tried to maintain a tolerant, even good-humored, attitude. About all we know to do is to continue in our efforts to make our pumps still better . . to widen their scope of service . . to price them fairly and sell them honestly.

When you are offered a pump that may "look for the world" like a Viking, please remember this. An imitation can only promise you performance . . while a Viking can actually PROVE it . . by the more than 350,000 Viking Rotary Pumps in successful operation today.

After all there are some very marked differences between the Original and Genuine Viking and the imitations. Before you buy rotary pumps it will pay you to find out what they really are. In fact we will be pleased to tell you, if you will just drop us a line.



Study the Viking Patented Principle

1—Rotor and idler mesh, forming barrier between ports. 2—Idler drawing away, creating suction and opening to be filled with liquid. 3—Spaces between rotor and idler teeth completely filled. 4—Idler and rotor teeth mesh again, forcing liquid out.

VIKING PUMP COMPANY

CEDAR FALLS, IOWA

CHICAGO, ILL., 549 W. Washington St.; CLEVELAND, O., Marshall Bldg., 11 Public Square; DETROIT, MICH., Hamilton Ave. & W. Grand Blvd.; LOS ANGELES, CALIF., 2036 So. Santa Fe Avenue; MILWAUKEE, WISC., 2310 West Vliet Street; MINNEAPOLIS, MINN., 5134 Lyndale Avenue, So.; NEW YORK, N. Y., 342 Madison Avenue; TULSA, OKLA., 1424 So. Boston Avenue.